



2008

Comprehensive Annual Financial Report  
for Fiscal Year Ended June 30, 2008



Arizona State Retirement  
**SYSTEM**

A COMPONENT UNIT OF THE STATE OF ARIZONA ■ DELIVERING SERVICE WITH PRIDE

DELIVERING SERVICE WITH...

# PRIDE

## OUR VISION

*For the benefit of our members...*  
the Arizona State Retirement System will be a leading state benefit plan administrator in the areas of:

- Core Member Services
- Investment Performance
- Funded Status
- Operational Effectiveness

This will be accomplished while keeping program benefits and associated costs relatively aligned and maintaining actuarial and fiscal integrity.

## OUR VALUES

### **Professionalism.**

A highly capable workforce will promote a professional and respectful environment and *lead* the organization.

### **Results.**

A results-oriented approach to operations will *energize* the organization.

### **Improvement.**

A climate of continuous quality improvement and enhanced efficiencies will *drive* the organization.

### **Diversity.**

Engagement of diversity by the appreciation, recognition and support for all people will propel the organization to ever greater achievement.

### **Excellence.**

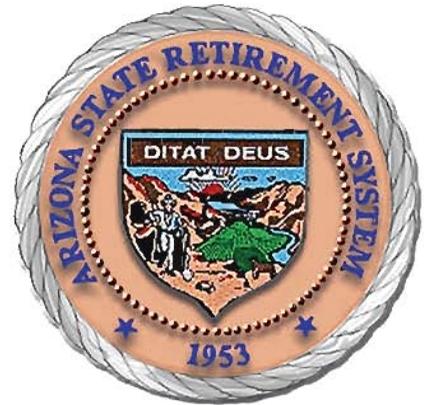
A commitment to service excellence will *permeate* the organization.



ARIZONA STATE  
RETIREMENT SYSTEM

# Arizona State Retirement System

A COMPONENT UNIT OF THE STATE OF ARIZONA



*Mr. Michael Townsend, Chair*  
*Mr. Keith Meredith, Vice Chair*

*Report Prepared by the Staff of the*  
*Arizona State Retirement System*

*Paul Matson, Director*

Comprehensive Annual Financial Report  
for Fiscal Year Ended June 30, 2008

2008



## **Table of Contents**

### **I. Introductory Section**

Certificate of Achievement for Excellence in Financial Reporting .....	1
Public Pension Standards Award .....	2
Letter from the Chairman .....	3
Letter of Transmittal from the Director .....	5
Administrative Organization:	
Organizational Chart .....	11
ASRS Board of Trustees .....	12
Executive Staff .....	13
Chief Outside Professional Services .....	14
Summary of 2008 Retirement Legislation .....	15

### **II. Financial Section**

Independent Auditors' Report .....	22
Management's Discussion and Analysis .....	24
Basic Financial Statements .....	30
Combined Statement of Plan Net Assets .....	30
Combined Statement of Changes in Plan Net Assets .....	31
Notes to the Basic Financial Statements .....	32
Required Supplementary Information .....	50
Schedule of Funding Progress .....	50
Schedule of Employer Contributions .....	50
Notes to Required Supplementary Information .....	51
Additional Supplementary Information .....	55
Combining Schedule of Retirement Net Assets .....	55
Combining Schedule of Changes in Retirement Net Assets .....	56
Schedule of Additions by Source .....	57
Schedule of Deductions by Type .....	57
Schedule of Administrative Expenses .....	58
Schedule of Professional Consultant Fees .....	59
Schedule of Total Investment Income by Manager .....	60
Schedule of Total Investment Expenses .....	62

---

## Table of Contents

### III. Investment Section

Investment Report .....	66
Investment Results .....	69
Performance Accounting / Computation Standards .....	69
Annualized Rates of Return .....	69
Historical Rates of Return .....	69
Monthly Returns .....	70
Net Income from Investments .....	70
Ten Year Review of Investment Income .....	71
Asset Allocation .....	72
Schedule of Investments .....	72
Equity Portfolio Profile .....	73
Equity Sub-Sector Allocation .....	73
Ten Largest Domestic Equity Holdings .....	73
Distribution by Market Sector .....	74
Ten Largest International Equity Holdings .....	74
Summary of Broker Commissions .....	74
Fixed Income Portfolio Profile .....	75
Distribution by Sector .....	75
Distribution by Coupon .....	75
Distribution by Maturity .....	75
Ten Largest Domestic Fixed Income Holdings .....	76
Real Estate Portfolio Profile .....	76
Ten Largest Real Estate Managers .....	76
Private Equity Portfolio Profile .....	77
Ten Largest Private Equity Managers .....	77
Opportunistic Portfolio Profile .....	77
Largest Opportunistic Equity Managers .....	77
Schedule of Broker Commissions - Domestic Equity Trades .....	78
Schedule of Broker Commissions - Foreign Equity Trades .....	80

---

## **Table of Contents**

### **IV. Actuarial Section**

#### **Plan and HBS**

Actuarial Certification Statement - Plan and HBS .....	84
Actuarial Valuation of the ASRS Plan. ....	88
General Actuarial Information - Plan and HBS .....	91
Summary of Benefit Provisions - Plan and HBS. ....	94
Statement of Actuarial Methods and Assumptions Used in Determining Cost - Plan and HBS ..	99
Schedule of Plan Active Member Valuation Data – Last 6 Years .....	104
Schedule of Plan Retirees Added to and Removed from Rolls – Last 6 Years .....	104
Schedule of Unfunded (Over) Accrued Liabilities – Plan – Last 10 Years .....	105
Solvency Test – Last 10 Years .....	106
Schedule of Recommended vs. Actual Plan Contributions – Last 10 Years .....	107
Analysis of Financial Experience for the Plan .....	108

#### **LTD**

Actuarial Certification Statement - LTD .....	109
General Actuarial Information - LTD .....	112
Summary of the Benefit Provisions - LTD .....	113
Statement of Actuarial Methods and Assumptions Used in Determining Cost - LTD .....	115
Schedule of Benefit Recipients Added to and Removed from Rolls - Last 6 Years. ....	117
Schedule of Unfunded (Over) Accrued Liabilities - LTD - Last 6 Years .....	117
Solvency Test - Last 6 Years .....	118
Schedule of Recommended vs. Actuarial LTD Contributions - Last 10 Years .....	118
Analysis of Financial Experience for LTD .....	119

#### **Legislative Plan Changes - Plan, HBS and LTD**

Summary of Legislative Plan Changes .....	121
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## V. Statistical Section

### Financial Trends

1.) Net Assets . . . . .	134
<i>Last 10 Fiscal Years</i>	
2.) Changes in Net Assets . . . . .	135
<i>Last 10 Fiscal Years</i>	
3.) Benefits Paid . . . . .	137
<i>Last 10 Fiscal Years</i>	

### Revenues

1.) Contributions Received . . . . .	138
<i>Last 10 Fiscal Years</i>	
2.) Actual Contribution Rates . . . . .	139
<i>Last 10 Fiscal Years</i>	

### Operations

1.) Members by Type of Benefit . . . . .	140
<i>As of June 30, 2006</i>	
2.) Average Benefit Payments . . . . .	141
<i>Last 10 Fiscal Years</i>	
3.) Principal Participating Employers . . . . .	143
<i>Current Year and Nine Years Ago</i>	

**Arizona State Retirement System**  
A Component Unit of the State of Arizona



# **Introductory Section**



## **Certificate of Achievement for Excellence in Financial Reporting**

### Certificate of Achievement for Excellence in Financial Reporting

Presented to

### The Arizona State Retirement System

For its Comprehensive Annual  
Financial Report  
for the Fiscal Year Ended  
June 30, 2007

A Certificate of Achievement for Excellence in Financial Reporting is presented by the Government Finance Officers Association of the United States and Canada to government units and public employee retirement systems whose comprehensive annual financial reports (CAFRs) achieve the highest standards in government accounting and financial reporting.



*Charles S. Cox*

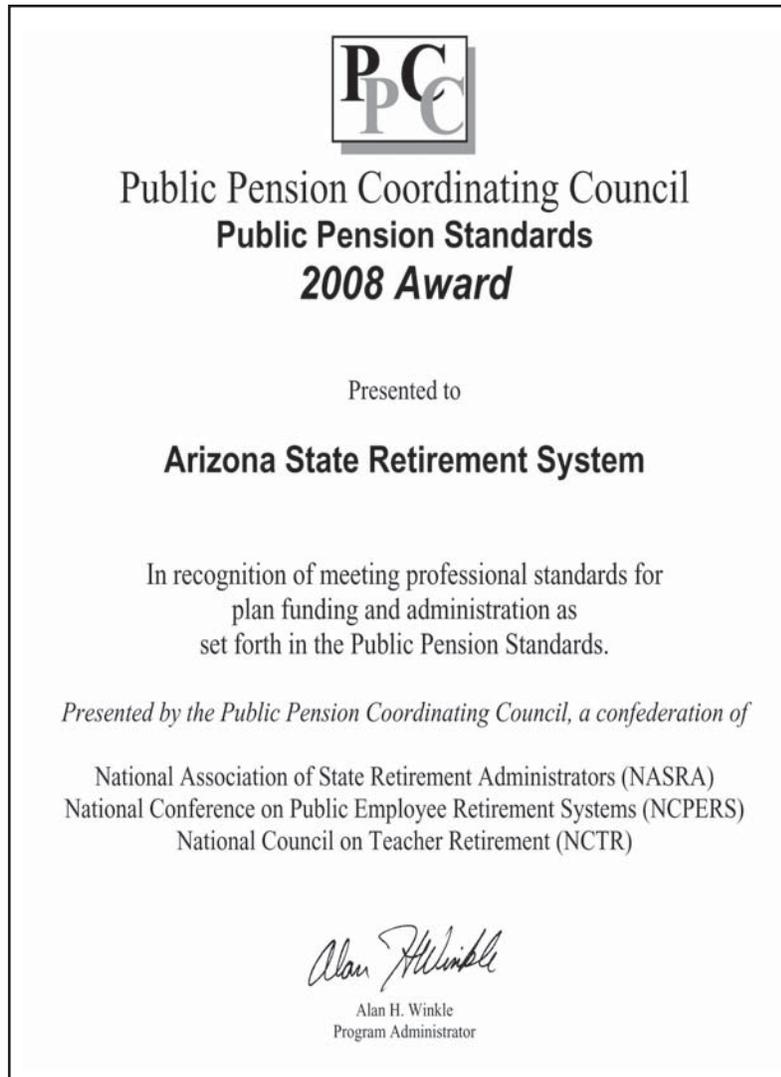
President

*Jeffrey R. Emer*

Executive Director

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Arizona State Retirement System for its comprehensive annual financial report for the fiscal year ended June 30, 2007. This was the 19th consecutive year that the Arizona State Retirement System has achieved this prestigious award.

## Public Pension Standards Award for Plan Funding and Administration



The National Association of State Retirement Administrators (NASRA), National Conference on Public Employee Retirement Systems (NCPERS), and the National Council on Teacher Retirement (NCTR) awarded a Public Pension Standards Award to the Arizona State Retirement System for plan design and administration as set forth in the Public Pension Standards for 2008. The Public Pension Standards are intended to reflect minimum expectations for public retirement system management and administration, as well as serve as a benchmark by which all defined benefit public plans should be measured. Changes to the standards for 200 - the Standards have been separated into the Administrative Standards and the Funding Standard. A system may qualify for and receive a Recognition Certificate for either the Administrative or Funding Standard, or both. A system that qualifies for both certificates will be awarded the Public Pension Coordinating Council Standards Award. The ASRS qualified for both Standard Awards. This is the 4th consecutive year that the Arizona State Retirement System has received this prestigious award.

## Letter from the Chairman



### ARIZONA STATE RETIREMENT SYSTEM

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1300 NORTH CENTRAL AVENUE • PO BOX 33910 • PHOENIX, AZ 85067-3910 • PHONE (602) 240-2000  
7660 EAST BROADWAY BOULEVARD • SUITE 108 • TUCSON, AZ 85710-3776 • PHONE (520) 239-3100

Paul Matson  
*Director*

TOLL FREE OUTSIDE METRO PHOENIX AND TUCSON 1-800-621-3778

December 5, 2008

The Honorable Janet Napolitano  
Governor of Arizona  
State Capitol  
1700 W. Washington St.  
Phoenix, Arizona 85007

Dear Governor Napolitano:

On behalf of the Arizona State Retirement System (ASRS) Board of Trustees, I present you with the fifty-fifth Comprehensive Annual Financial Report of the Arizona State Retirement System. This report provides an in-depth review of the financial statements, investment information, actuarial calculations and statistical data of the Arizona State Retirement System for the fiscal year ended June 30, 2008. The report also includes 10-year summaries of a variety of indicators that affect or reflect the ASRS operations.

The actuarial valuation performed by Buck Consultants LLC., is as of June 30, 2007 and indicates that the ASRS total plan achieved an actuarial funded status of 82.8 percent, down from 83.7 percent the previous year. The 2007 market value funded status for total plan assets of 86.4 percent reflects an increase over the prior year. The change in market value funding percentage from the prior year's 79.6 percent is a result of higher than expected investment returns during 2007.

During the fiscal year ended June 30, 2008, the market value funded status for the total plan is 74.7 percent and the total rate of return on investments was -7.6 percent. The annualized three, five, ten and inception rates of return were 6.1 percent, 8.8 percent, 5.5 percent, and 10.4 percent. The ASRS assumed rate of return is 8 percent. As of June 30, 2008, the ASRS total fund stood at nearly \$26.1 billion, \$2.4 billion less than at the same time the previous year.

The contribution rate, as determined by actuarial analysis, is designed to ensure the ASRS fund remains adequate to meet current and future obligations to members. The actuarially recommended rate for fiscal year 2008-09 is 9.45 percent for both the employer and employee, which includes 8.95 percent for the defined benefit pension plan and health insurance supplement and 0.50 percent for the long term disability plan. The calculated contribution rate decreased to 9.40 percent for the 2009-10 fiscal year, which includes 9.00 percent for the pension fund and health supplement and 0.40 for the long term disability plan.

Although this annual financial report covers the fiscal year ended June 30, 2008, it is important to note that the investment markets have experienced significant negative returns since June 30, 2008 which will be accounted

## Letter from the Chairman

in next year's annual report. Such market volatility makes it difficult to predict future contribution rates, but it appears that should the markets fail to improve in any meaningful fashion, contribution rates will increase beginning July 1, 2010. These same market circumstances have also led to no excess earnings being available to fund any additional permanent benefit increase to our retired members.

We continue to closely monitor our investments and review our asset allocation strategy, and will, when prudent, make adjustments to our portfolios. However, the ASRS will continue to take a long-term approach to investments, which we believe will best protect the fund in these uncertain times.

The ASRS continues to be engaged in program and policy review and, when appropriate, will be seeking legislative changes to ensure the retirement system operates efficiently and effectively. This is an on-going process of program, policy and legislative review, and changes that have been implemented to date have resulted in significant liability reductions over the past several years.

The ASRS has also continued its effort to improve member services, including automation of many services, improved website services and an advanced imaging system of records. These improvements have led, not only to increased member satisfaction as measured by regular surveys, but to cost savings and avoidances as well.

Our major technology initiative was modified to be completed in September 2008. I am very pleased to report that we believe we met our objectives, and came in under budget.

The ASRS is structured to provide a lifelong income and a range of additional benefits to our members when they retire, including a retiree medical and dental insurance plan and the premium benefit program which helps pay a portion of the insurance plans' premiums.

Lastly, I would like to note that the total membership of the ASRS, including active, inactive, disabled and retired members, reached a record of more than 548,000 as of June 30, 2008. Also during that fiscal year, more than 97,000 retirees, survivors and disabled members received in excess of \$1.9 billion in benefits.

The ASRS Board is committed to prudent management of the Retirement System's assets for the benefit of our members. At the same time, we are aware of our responsibilities to the State of Arizona, its taxpayers, and our member employers. We are appreciative of the cooperation extended to this agency by the Governor's Office and the State Legislature, which enables and empowers us to meet the challenges we face in today's economic climate.

The Board of Trustees pledges to continue to administer the affairs of the Arizona State Retirement System in the most competent and efficient manner possible.

Respectfully submitted,



Mr. Michael Townsend  
Board Chair  
Arizona State Retirement System

## Letter of Transmittal from the Director



### ARIZONA STATE RETIREMENT SYSTEM

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3300 NORTH CENTRAL AVENUE • PO BOX 33910 • PHOENIX, AZ 85067-3910 • PHONE (602) 240-2000  
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Paul Matson  
Director

TOLL FREE OUTSIDE METRO PHOENIX AND TUCSON 1-800-621-3778

December 5, 2008

Mr. Michael Townsend, Chair  
Arizona State Retirement System Board of Trustees  
3300 North Central Avenue, 14th Floor  
Phoenix, Arizona 85012

Dear Mr Townsend:

On behalf of the ASRS staff, I present the fifty-fifth Comprehensive Annual Financial Report (CAFR) of the Arizona State Retirement System (ASRS), a component unit of the State of Arizona, for the fiscal year ended June 30, 2008.

Title 38 of the Arizona Revised Statutes requires the ASRS Board of Trustees (ASRS Board) to submit an annual report to the Governor and the Legislature within eight months of the close of each fiscal year. This report complies with the legal requirements governing the preparation and content of annual reports.

Responsibility for both the accuracy of the data, and the completeness and fairness of the presentation, rests with the ASRS management. Management relies on a comprehensive framework of internal controls to provide reasonable, rather than absolute, assurance that the financial statements are free of any material misstatements.

Heinfeld, Meech & Co., P.C. has issued an unqualified ("clean") opinion on the ASRS financial statements for the year ended June 30, 2008. The Independent Auditors' Report is located at the front of the financial section of this report.

Management's discussion and analysis (MD&A) immediately follows the Independent Auditors' Report and provides a narrative introduction, overview, and analysis of the basic financial statements. MD&A complements this letter of transmittal and should be read in conjunction with it.

### History and Overview

The ASRS was created in 1953 to provide defined contribution retirement benefits to employees of the state of Arizona, Arizona universities, and political subdivisions. During calendar year 1954, Arizona teachers voted to join the ASRS effective January 1, 1955. In 1970, the state legislature authorized the creation of a defined benefit plan, contingent upon the election to transfer a minimum 70 percent of the ASRS membership. More than 80 percent voted to transfer to the defined benefit plan, which became effective July 1, 1971.

## Letter of Transmittal from the Director

At June 30, 2008, total ASRS membership, including active, inactive, disabled and retired members is 548,857. There are 734 employers participating in the ASRS, including school districts, charter schools, state colleges and universities, and local, county and state governments.

In addition to pension benefits, the ASRS provides a health insurance premium benefit and sponsors medical and dental coverage for retired and disabled members and their eligible dependents. Active members receive long-term disability insurance coverage equal to two-thirds of pay at the time of disablement.

During FY 2007-08, more than 97,000 retired annuitants, their survivors, and disabled members received in excess of \$1.9 billion in benefits. As of June 30, 2008 there were 35,973 retired members and their families enrolled in the ASRS-sponsored medical program and 29,991 retired members and their families enrolled in dental plans through the ASRS.

ASRS Board Trustees are appointed to three-year terms by the governor and confirmed by the Arizona State Senate. Four trustees of the ASRS Board must have a minimum of 10 years investment experience and each trustee who represents an ASRS member group shall have no less than five years of administrative management experience. There is no limit on the number of terms an ASRS Board Trustee may serve. During FY 2007-08, Governor Janet Napolitano appointed the following ASRS Board Trustees to the Board:

- Mr. Mike Townsend, Chairman, re-appointed as a representative of political subdivisions; term to expire on January 17, 2011.
- Mr. Christopher Harris, re-appointed as a representative of the public; term to expire on January 21, 2011.
- Mr Steve Zeman, re-appointed as a representative of retirees, term to expire on January 21, 2011.

## Major Initiatives for Fiscal Year 2007-08

### *Investments:*

- Developed an ASRS Investment Management Statement of Beliefs and Value Proposition which is designed to provide the basis for congruent and synergistic strategic and tactical investment decision-making.
- Implemented changes to the ASRS Board Governance Handbook relative to the establishment of Investment Asset Class Committees which improve the efficiency, effectiveness and consistency of ASRS investment decision-making and oversight process.
- Enhanced ASRS Investment Rebalancing Policy and Cash-Flow Management process which are strategic and tactical tools to mitigate risk and positively contribute to ASRS investment objectives.
- Identified and implemented value-strategies and tactical investment opportunities which take advantage of dislocated financial market conditions, improve the diversification of ASRS assets and provide anticipated attractive risk-adjusted returns.

## Letter of Transmittal from the Director

### **Benefits:**

- Completed its pension payroll system upgrade. As a result of this project, retirees now have the ability to view their payroll history via the Web and update their direct deposit and tax elections. In addition, the upgrade included creating an automated benefit audit process. This process will reduce turnaround time and improve communication of benefit changes with members.
- Implemented a member data integrity project. This project focuses on reducing the number of member records with incorrect demographic data, improving our success rate for finding inactive members who are eligible for a retirement benefit, and strengthening our disbursement controls.

### **Administration**

- Developed an ASRS Values Initiative which focuses on service excellence, work environment and public image. Related strategies have been implemented that reinforce behaviors that will develop, cultivate and support the ASRS values of Professionalism, Results, Improvement, Diversity and Excellence.
- Received approval from the State Library and Archives to replace member paper documents with electronically imaged documents. The approval process is a rigorous one and involved documenting our imaging quality controls to ensure compliance with state statutes and federal guidelines. Imaged documents provide staff with simultaneous access to member documents, eliminates misplaced documents, eliminates the need for physical storage, and improves the agency's ability to comply with record retention statutes.

### **Investment Policies**

An integral part of the overall investment policy is the strategic asset allocation policy, which is designed to optimize returns while minimizing risk. The ASRS maintains its investment assets in accordance with Board approved strategic asset allocation policy. Investment assets are managed in 28 externally managed and 6 internally managed portfolios, which are diversified in U.S. equities, U.S. fixed income, international equities, real estate and private equity.

After deducting investment expenses, the ASRS achieved the following one, three, five, ten year and inception net rates of return for periods ended June 30, 2008:

#### **Annualized Rates of Return**

*(Retirement & Health Benefit Supplement)*

	<b>1 Year</b>	<b>3 Year</b>	<b>5 Year</b>	<b>10 Year</b>	<b>Inception</b> (June 30, 1975)
ASRS Total Fund	-7.6%	6.1%	8.8%	5.5%	10.4%

## Letter of Transmittal from the Director

The ASRS adheres to all statutory requirements set by Arizona State law. In addition the ASRS has established investment guidelines for its internal and external investment managers and a complete set of policies, procedures, compliance requirements, and oversight of internal investment management to ensure that investment assets are prudently managed. Both internal and external compliance procedures are in place. Oversight responsibilities reside with the ASRS Board. Details of investments are contained in the Investment Section of this report.

### Funding

Any excess of additions, which include contributions and investment earnings, over deductions, which include benefits and administrative expenses, is accumulated by the ASRS in order to meet future benefit obligations due to retirees and beneficiaries. State statutes require the ASRS to conduct an annual actuarial valuation of its plan assets and liabilities. Legislation passed by the State legislature during FY 2005 changed actuarial determination of contribution rates from a biennial process to an annual one effective June 30, 2007.

The funding objective of the ASRS is to maintain reasonably stable contribution rates and to achieve an ultimate funded status of 100 percent. According to the ASRS' most recently available actuarial valuation, dated June 30, 2007, the actuarial value of total plan assets (defined benefit and health insurance) was \$26.5 billion and the actuarial accrued liability was \$32.0 billion. The unfunded actuarial accrued liability of \$5.5 billion results in an actuarial funding ratio of 82.8 percent for the total plan. The change in funding percentage from last year's 83.7 percent is primarily due to continued recognition of lower investment returns for fiscal years 2002 and 2003. The actuarial funding ratios for the individual components of the total plan are as follows: retirement – defined benefit 83.2 percent, and health insurance premium benefit supplement (HBS) 72.7 percent. The funding ratios for the defined contribution retirement system and the long term disability (LTD) program are 119.86 percent and 38.33 percent, respectively.

The actuarial funding ratios for the period ending June 30, 2008 for the individual components of the total plan are as follows: retirement – defined benefit 82.1 percent, and health insurance premium benefit supplement (HBS) 85.7 percent. The funding ratios for the defined contribution retirement system and the long term disability (LTD) program are 102.2 percent and 49.7 percent, respectively.

The market value funding ratios for the period ending June 30, 2007 for the individual components of the total plan is as follows: retirement – defined benefit 87.1 percent, and health insurance premium benefit supplement (HBS) 72.4 percent. The market value funding ratios for the defined contribution retirement system and the long term disability (LTD) program are 119.8 percent and 34.1 percent, respectively.

The market value funding ratios for the period ending June 30, 2008 for the individual components of the total plan is as follows: retirement – defined benefit 74.7 percent, and health insurance premium benefit supplement (HBS) 75.2 percent. The market value funding ratios for the defined contribution retirement system and the long term disability (LTD) program are 102.2 percent and 44.3 percent respectively.

A detailed discussion of funding is provided in the Actuarial Section of this report. Funding status and progress for the ASRS based on the most currently available valuation is presented in the Notes to the Financial Statements.

## Letter of Transmittal from the Director

### Cost Saving Initiatives

In order to both increase the funded status of the pension plan as well as mitigate future increases in contribution rates, the ASRS has been engaged in significant program and policy review. While this is an on-going process, program, policy and legislative initiatives that have been implemented are estimated to have reduced total contributions to the ASRS by approximately \$212 million per year, which is equivalent to approximately \$2.3 billion in liability savings for the group of all current employees, or approximately \$4.7 billion in liability savings for the group of all current and future employees. Over the long term, these very significant savings will reduce future increases in contribution rates to both employees and employers by an average of approximately 2.33 percent in total each year.

### Estimated Impact of ASRS Cost Reduction Initiatives as of June 30, 2008, Valuation Date

*Amounts in Millions of Dollars*

Action	Reduction in Total Contribution Rate	Annual Reduction in Total Contribution Amount	Present Value of Savings on Actuarial Valuation Basis
<b>Cost Savings Initiatives Contained in Current Valuation &amp; Reflected in Lower Current Contribution</b>			
Change basis for service purchases from normal cost to actuarial present value	0.60%	\$55.00	\$439.98
Decrease interest credited on withdrawn contributions from 8% to 4%	0.27%	\$24.70	\$210.24
Correction of Permanent Benefit Increase reserve	0.04%	\$3.50	\$45.96
<b>Sub-total, savings in current valuation</b>	<b>0.91%</b>	<b>\$83.20</b>	<b>\$696.18</b>
<b>Cost Savings Initiatives Contained in Future Valuation &amp; Reflected in Lower Future Contribution</b>			
Increase interest rate on payroll deduction agreements from 0% to 8%	0.16%	\$14.60	\$191.71
Pop-up restrictions	0.40%	\$36.90	\$484.52
Reimbursements for early retirement incentives	0.18%	\$16.10	\$211.40
Rescinding modified Deferred Retirement Option Plan	0.49%	\$44.90	\$589.57
Long Term Disability program design changes	0.03%	\$2.20	\$28.89
Long Term Disability -- changes to offsets and pre-existing condition period	0.15%	\$13.38	\$130.89
Recapture of unclaimed monies	0.01%	\$0.62	\$7.60
<b>Sub-total, savings in future valuation</b>	<b>1.42%</b>	<b>\$128.70</b>	<b>\$1,644.57</b>
<b>GRAND TOTAL</b>	<b>2.33%</b>	<b>\$211.90</b>	<b>\$2,340.75</b>

## Letter of Transmittal from the Director

### World Markets

As most of us are aware, world markets have experienced a sharply fluctuating downward trend since October 2007. Although the ASRS funds are a well-diversified and professionally managed portfolio of investments, they have incurred significant losses since June 30, 2008. Between June 30, 2008 and November 18, 2008, ASRS investments have declined by approximately 26%. A sustained loss of that magnitude will have the affect of reducing the actuarial value and market value funded status of the funds. In addition, the combined pension and health benefit supplement contribution rate would increase for future years beginning July 1, 2010.

### Awards

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the ASRS for its CAFR for the fiscal year ended June 30, 2007. The ASRS has received this prestigious award in each of the last 19 years.

To be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized CAFR that satisfies both accounting principles generally accepted in the United States of America and applicable legal requirements. A Certificate of Achievement is valid only for one year. We believe this report continues to conform to the Certificate of Achievement Program requirements and we are submitting it to the GFOA to determine its eligibility for another certificate.

In addition, the Public Pension Coordinating Council awarded a Pension Standards Award for 2008 to the ASRS for meeting professional standards for plan design and administration. To be awarded the Pension Standards Award, a public employee retirement system must certify that it meets requirements in six areas of assessment. Those areas are: comprehensive benefit program, funding adequacy, actuarial, audit, investments and communications. The Pension Standards Award is valid for one year. This is the fourth year the ASRS has received this award.

### Acknowledgements

This report represents the culmination of hours of hard work by the ASRS General Accounting and External Affairs staff. It is intended to provide complete and reliable information for decision making, to insure compliance with legal requirements, and is a means of measuring the responsible stewardship of the assets of the ASRS.

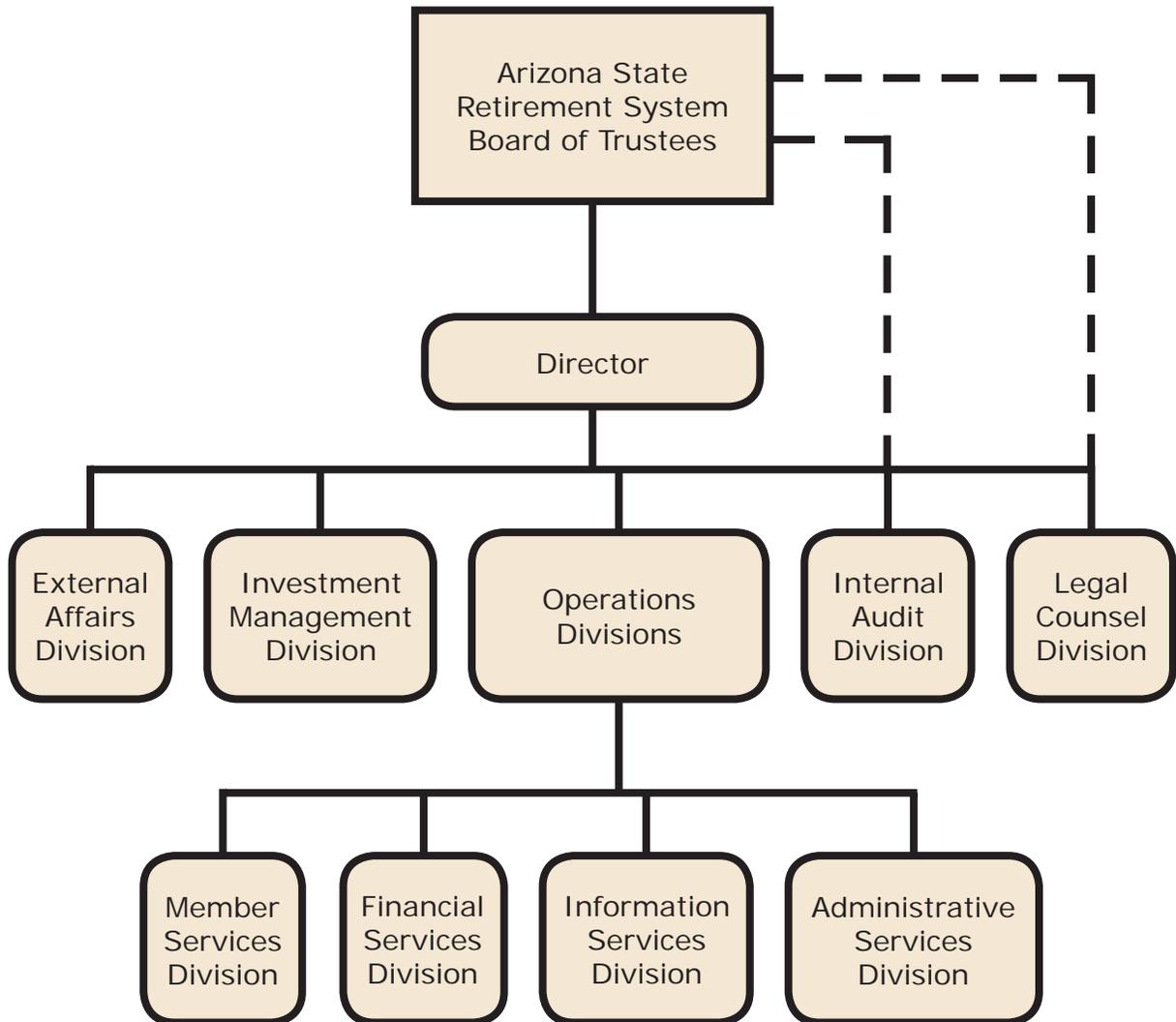
I would like to express my gratitude to the ASRS Board for its support for and leadership in planning and conducting the financial affairs of the ASRS in a responsible and progressive manner. The ASRS Board, along with the ASRS Executive and Senior Management and the entire staff of the ASRS has been instrumental in maintaining the high quality of service and performance which has become the standard for the ASRS.

Respectfully submitted,



Paul Matson, Director

## Organizational Chart



## ASRS Board of Trustees



**Michael Townsend**  
**CHAIR**  
*Flagstaff, Political Subdivisions*



**Dr. Keith Meredith**  
**VICE CHAIR**  
*Tucson, Member at Large*



**David Byers**  
*Phoenix, State Employees*



**Thomas Connelly**  
*Phoenix, Public*



**Jaime Gutierrez**  
*Tucson, Educators*



**Christopher Harris**  
*Phoenix, Public*



**James McLaughlin**  
*Gilbert, Public*



**Lawrence Trachtenberg**  
*Scottsdale, Public*



**Steven Zeman**  
*Phoenix, Retirees*

## Executive Staff



**Paul Matson**

*Director*



**Gary R. Dokes**

*Chief Investment Officer*



**Anthony Guarino**

*Deputy Director,  
Chief Operations Officer*

## Chief Outside Professional Services

### **ACTUARY**

*Buck Consultants, LLC*  
Phoenix, AZ

### **LONG TERM DISABILITY BENEFITS**

*Sedgwick CMS Company*  
Calabasas, CA

### **CUSTODIAL BANK**

*BNY Mellon*  
Pittsburgh, PA

### **INDEPENDENT AUDITORS**

*Heinfeld, Meech & Co., P.C.*  
Tucson, AZ

### **GENERAL INVESTMENT CONSULTANT**

*William M. Mercer Investment Consulting, Inc.*  
Los Angeles, CA

### **PRIVATE REAL ESTATE CONSULTANT**

*The Townsend Group*  
Cleveland, OH

### **PRIVATE EQUITY CONSULTANT**

*Ennis Knupp + Associate*  
Chicago, IL

### **INVESTMENT MANAGERS**

*Investment managers are listed in the "Schedule of Broker Commissions"*  
see page 78

## **Summary of 2008 Retirement Legislation**

**T**he 48th Legislature, Second Regular Session adjourned June 27, 2008. Below is a brief summary of bills that have been passed into law that may affect ASRS members and employers. To view legislation in its entirety, visit the Arizona State Legislature's website at [www.azleg.gov](http://www.azleg.gov). All bills listed below are effective on the general effective date (September 26, 2008) unless otherwise noted.

### **House Bill 2061 – ASRS; global security risk report (Laws 2008, Chapter 133)**

Signed by the Governor on April 29, 2008, this bill:

- Requires ASRS to submit its annual report on Global Security Risk to the Senate and House of Representatives standing committees on retirement issues, rather than the Senate Finance and House Government and Ways and Means standing committees.

[Note: the section of law modified by this bill (§38-716) is repealed by SB 1489.]

### **House Bill 2116 – CORP; joinders; credited service (Laws 2008, Chapter 242)**

Signed by the Governor May 27, 2008, this bill:

- Allows all prior dispatcher credited service with ASRS to transfer to CORP under a group transfer.
- Expands the timeframe for the ASRS to transfer assets to the new retirement system from 60 to 90 days.

### **House Bill 2120 – CORP; DPS detention officers (Laws 2008, Chapter 144)**

Signed by the Governor May 1, 2008, this bill:

- Expands the definition of designated position to include State detention officers.
- Requires the Department of Public Safety (DPS) to have a local board and to enter into a joinder agreement with the Fund Manager to provide for membership.
- Provides that all prior ASRS service will transfer to CORP unless the employee irrevocably elects to remain in the ASRS.
- Requires the ASRS to recover overpaid money by reducing a benefit owed to any member, beneficiary, or alternate payee.

## Summary of 2008 Retirement Legislation

### **House Bill 2151 – NOW: Iran; public fund divestment (Laws 2008, Chapter 235)**

Signed by the Governor May 23, 2008, this bill:

- Provides for mandatory engagement with and potential divestment from companies that have invested, since August 5, 1996, \$20 million or more in any year in Iran's petroleum energy sector.
- Allows a fund to cease divestment from or reinvest in scrutinized companies if the value of the impacted account is 0.5% less than without divestment.
- Requires State contractors to certify they have no prohibited business operations in Iran and prohibits the state or political subdivisions from purchasing goods or services from a scrutinized company.
- Specifies engagement, divestment, and reporting timelines.
- *Emergency measure effective May 23, 2008.*

### **House Bill 2705 – Sudan; investments; business operations; prohibition (Laws 2008, Chapter 1)**

Signed by the Governor March 10, 2008, this bill:

- Provides for mandatory engagement with and potential divestment from companies meeting specific Sudan-related business operations criteria.
- Requires State contractors to certify they have no prohibited business operations in Sudan.
- Specifies engagement, divestment, and reporting timelines.

### **Senate Bill 1043 – NOW: CORP; judiciary; other designated positions (Laws 2008, Chapter 185)**

Signed by the Governor May 12, 2008, this bill:

- Allows the local board of the judiciary to designate positions within the Administrative Office of the Courts (AOC) for membership in CORP that require direct contact with and primarily provide training or technical expertise to county probation, surveillance or juvenile detention officers, if the employee is currently a member of CORP employed as a probation, surveillance or juvenile detention officer and has 5 years of service under CORP. The employee may request the determination within 90 days of taking the position, and when the employee terminates, the position reverts back to ASRS membership.

### **Senate Bill 1225 – ASRS; federal conforming changes (Laws 2008, Chapter 29)**

Signed by the Governor April 14, 2008, this bill:

- Makes changes to comply with new IRS laws and regulations, most notably the Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA).

## **Summary of 2008 Retirement Legislation**

- Clarifies the description of a direct rollover.
- Allows the ASRS to accept direct rollovers of after-tax contributions.
- Requires the ASRS to separately account for any transferred after-tax amounts.
- Changes the assumed interest rate and mortality tables used in calculating the maximum annual dollar limitation applicable to forms of distributions other than a straight life annuity.
- Provides references to the new interest factor and mortality tables required by EGTRRA.
- Excludes qualified transportation fringe benefits and certain cash benefits payable under a cafeteria plan from the definition of “compensation.”
- Updates the definition of “eligible rollover distribution” to allow direct rollovers of after-tax employee contributions held in ASRS to an IRA, a qualified 401(a) plan, or a 403(b) annuity contract.
- Allows non-spouse beneficiaries to make a direct, tax-free transfer of any death benefits to an IRA maintained in the name of the deceased member for the benefit of the non-spouse beneficiary (applicable to distributions made on or after January 1, 2007).

### **Senate Bill 1407 – NOW: ASRS; administration procedures (Laws 2008, Chapter 264)**

Signed by the Governor June 10, 2008, this bill makes numerous changes to the administration of the ASRS, including:

#### **PLAN ADMINISTRATION (ALL PROVISIONS EFFECTIVE JUNE 10, 2008)**

- Modifies one of the salary calculations used for service purchases from the last full pay period prior to the request to a calculation that requires the ASRS to take the five pay periods prior to the request, drop the high and low, and average the remaining three.
- Clarifies that the salary calculations used for military and other public service purchases are also used for leave of absence purchases.
- Grants the Board rulemaking authority over the Plan, the LTD Program, and Transfers.
- Clarifies that a member who purchases previously forfeited service credit is subject to the benefit structure and duties in place when the person again becomes a member.
- Requires the ASRS to recover overpaid money by reducing a benefit owed to any member, beneficiary, or alternate payee.

#### **UNCLAIMED PROPERTY (ALL PROVISIONS EFFECTIVE JULY 1, 2009)**

- Exempts the ASRS from statutory unclaimed property procedures.
- Assumes that property is abandoned if the apparent owner has not communicated or shown an interest in the property within three years of the IRS’s minimum distribution date (age 70.5).

## Summary of 2008 Retirement Legislation

- Clarifies the definitions of “Apparent Owner” and “Owner” to match with the Unclaimed Property statutes.
- States that interest stops accruing on property when it becomes abandoned, but includes interest (if appropriate) for a member who is subsequently found.
- Requires the ASRS to annually send a notice to a member-apparent owner beginning 5 years before the IRS minimum distribution date and for three years thereafter. Requires the ASRS to annually send a notice to a survivor-apparent owner beginning in the year of the 5th anniversary of the member’s death and for three years thereafter. If a notice is returned, requires the ASRS to make a good faith effort to locate the apparent owner by utilizing beneficiaries, public databases, third party address verification services, or a people search service (if the base amount is more than \$300).
- Allows the ASRS to pay for the people search service fee from the administration account, and prevents the fee from being paid from the benefit paid.
- Requires the ASRS to pay the money or a benefit to a person who returns to claim previously abandoned money plus interest, if applicable.
- Appropriates \$137,607 from the ASRS administration account to the ASRS in FY2008-09. The appropriation is non-lapsing.

### TRANSFERS PROCEDURES (ALL PROVISIONS EFFECTIVE JUNE 10, 2008)

#### Voluntary Transfers

##### *Long-term Disability (LTD) Recipients*

- Member elects whether to remain with ASRS or transfer to new retirement system. If the member transfers, their LTD payments terminate.

##### *ASRS Retirement Recipients*

- Member elects whether to remain with ASRS or transfer to new retirement system. If the member transfers, their retirement payments terminate (remaining assets would transfer).

##### *Payroll Deduction Agreements (PDAs)*

- ASRS transfers assets and service credits already accrued up to the date of the joinder agreement within 90 days of the effective date of the joinder agreement.
- PDA payments continue to ASRS.
- At termination and at the employee’s election, either:
  - Transfer all assets and service credit (APV at market value to the extent funded), unitized to the other retirement system. Employee makes up the difference (unless employer is specified in joinder statute). Employee has 30 days from termination to elect this option.
  - Refund the assets to the employee. Employee has 60 days from termination to submit refund application, otherwise they receive a direct payment.

## Summary of 2008 Retirement Legislation

### Mandatory Transfers

#### *Long-term Disability (LTD) Recipients*

- Member remains with ASRS.

#### *ASRS Retirement Recipients*

- Member remains with ASRS.

#### *Payroll Deduction Agreements (PDAs)*

- ASRS transfers assets and service credits already accrued up to the date of the joinder agreement within 90 days of the effective date of the joinder agreement.
- PDA payments continue to ASRS.
- At termination and at the employee's election, either:
  - Transfer all assets and service credit (APV at market value to the extent funded), unitized to the other retirement system. Employee makes up the difference (unless employer is specified in joinder statute). Employee has 30 days from termination to elect this option.
  - Inactive membership in ASRS (member can at any time apply for a refund or a monthly retirement benefit, if eligible).

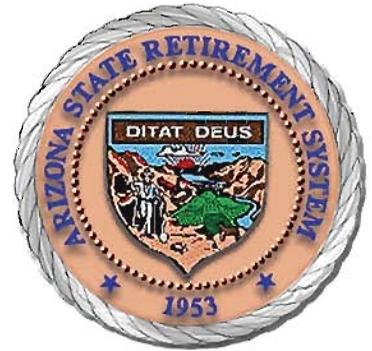
### **Senate Bill 1489 – NOW: divestments; terrorism countries; contract prohibition (Laws 2008, Chapter 201)**

Signed by the Governor May 12, 2008, this bill:

- Requires ASRS, PSPRS, and the State Treasurer to adopt a policy regarding countries designated by the US State Department as "State Sponsors of Terrorism" that includes procedures for identifying US companies that are in violation of 6(j) of the Export Administration Act, processes for communicating with the companies, and processes for divestment from those companies.
- Requires divestment from the companies identified by the Funds.
- Requires ADOA to send a notice to companies from which the funds divest notifying them that the State cannot purchase products or services from the company.
- Appropriates \$60,000 and ½ FTE from the ASRS Administration Account for the implementation of the Act.
- Repeals the Global Security Risk reporting requirements.



**Arizona State Retirement System**  
A Component Unit of the State of Arizona



**2008**  
**Financial**  
**Section**



## **Table of Contents**

### **II. Financial Section**

Independent Auditors' Report .....	22
Management's Discussion and Analysis .....	24
Basic Financial Statements .....	30
Combined Statement of Plan Net Assets .....	30
Combined Statement of Changes in Plan Net Assets .....	31
Notes to the Basic Financial Statements .....	32
Required Supplementary Information .....	50
Schedule of Funding Progress .....	50
Schedule of Employer Contributions .....	50
Notes to Required Supplementary Information .....	51
Additional Supplementary Information .....	55
Combining Schedule of Retirement Net Assets .....	55
Combining Schedule of Changes in Retirement Net Assets .....	56
Schedule of Additions by Source .....	57
Schedule of Deductions by Type .....	57
Schedule of Administrative Expenses .....	58
Schedule of Professional Consultant Fees .....	59
Schedule of Total Investment Income by Manager .....	60
Schedule of Total Investment Expenses .....	62

## Independent Auditors' Report



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### INDEPENDENT AUDITORS' REPORT

The Honorable Janet Napolitano  
Governor of the State of Arizona,  
Members of the Legislature, and  
The Board of Trustees

We have audited the accompanying Statement of Plan Net Assets of the funds of the Arizona State Retirement System (ASRS), a component unit of the State of Arizona, as of and for the year ended June 30, 2008, and the related Statement of Changes in Plan Net Assets of the funds for the year then ended. These basic financial statements are the responsibility of ASRS's management. Our responsibility is to express an opinion on these financial statements based on our audit. The comparative totals as of and for the year ended June 30, 2007, presented in the basic financial statements are included for additional analysis only. Our audit report dated November 18, 2008 expressed an unqualified opinion on these statements; however, we have not performed any auditing procedures on this information since the date of our report.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the net assets of the funds of the Arizona State Retirement System, a component unit of the State of Arizona, as of June 30, 2008, and the changes in net assets of the funds for the year then ended in conformity with accounting principles generally accepted in the United States of America.

In accordance with *Government Auditing Standards*, we have also issued our report dated November 18, 2008, on our consideration of the Arizona State Retirement System's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* and should be considered in assessing the results of our audit.

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## **Independent Auditors' Report**

The Management's Discussion and Analysis on pages 24 through 29 and the Schedule of Funding Progress and Schedule of Employer Contributions on page 50 are not a required part of the basic financial statements but are supplementary information required by accounting principles generally accepted in the United States of America. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the required supplementary information. However, we did not audit the information and express no opinion on it.

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise ASRS's basic financial statements. The Introductory Section, Additional Supplementary Information, Investment Section, Actuarial Section and Statistical Section are presented for purposes of additional analysis and are not a required part of the basic financial statements. The Additional Supplementary Information, as listed in the table of contents under the Financial Section, has been subjected to the auditing procedures applied in the audit of the basic financial statements and, in our opinion, are fairly stated in all material respects in relation to the basic financial statements taken as a whole. The Introductory Section, Investment Section, Actuarial Section and Statistical Section have not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we express no opinion on them.

*Heinfeld, Meech & Co., P.C.*

HEINFELD, MEECH & CO., P.C.  
Certified Public Accountants

November 18, 2008

## Management's Discussion and Analysis

This section presents management's discussion and analysis (MD&A) of the Arizona State Retirement System's (ASRS) Plan net assets and changes in Plan net assets for the fiscal year ended June 30, 2008. It is presented as a narrative overview and analysis. The discussion and analysis should be read in conjunction with the Letter of Transmittal included in the Introductory Section of the ASRS' Comprehensive Annual Financial Report (CAFR), and the basic financial statements and notes to the basic financial statements presented in the Financial Section of the CAFR.

### Financial Highlights

During FY 2008, ASRS assets decreased primarily as the result of negative conditions in the domestic and international equity markets. Stock markets reached historical high levels in October 2007 but quickly eroded during the remainder of the fiscal year as investors became increasingly concerned over a weakening housing market, the impact of sub-prime exposure on financial institutions, rising oil prices, increasing unemployment rates, slowing economic growth and rising inflation. As a result, over this period the ASRS' investments substantially underperformed its assumed 8 percent actuarial investment rate of return.

- The ASRS rate of return on investments for FY 2008 was -7.6 percent compared to 17.8 percent FY 2007. The decrease in the rate of return reflects the negative conditions in the global securities markets during the fiscal year.
- The ASRS combined total net assets held in trust for pension benefits decreased by 8.5 percent at FYE June 30, 2008 compared to FYE 2007. The decrease in the combined total net assets is primarily due to negative returns in the global securities markets during the fiscal year.
- The ASRS received a total of \$1.8 billion in employee and employer contributions during FY 2008 compared to \$1.6 billion in FY 2007. The

11.5 percent increase is due primarily to an increase in active membership and a contribution rate increase effective July 1, 2007.

- The ASRS paid \$1.9 billion in pension, disability, health insurance and survivor benefits during FY 2008 compared to \$1.8 billion in FY 2007. The 6.6 percent increase is due to an increase in the number of retirements.
- As of June 30, 2007, the most recent actuarial valuation, the Retirement and Health Benefit Supplement Funds combined were 82.8 percent funded. This compares to a combined funding ratio of 83.7 percent as of June 30, 2006. The change in funding percentage is primarily due to continued recognition of investment losses for fiscal years 2002 and 2003. Liability experience losses also affected the funded status of the plans during this valuation. Investment losses are recognized over a period of time while liability experience losses are recognized fully and immediately during the period in which they occurred.

### Overview of the Financial Statements

The MD&A is intended to serve as an introduction and overview of the ASRS financial section of the CAFR which comprise the following components: 1) basic financial statements, 2) notes to the basic financial statements, 3) required supplementary information and 4) other supplementary schedules. Collectively, this information presents the combined net assets held in trust for pension benefits which includes health benefit supplements and long term disability for each of the funds administered by the ASRS as of June 30, 2008. This financial information also summarizes the combined changes in net assets held in trust for pension benefits for the year then ended. The information available in each of these sections is briefly summarized as follows:

## Management's Discussion and Analysis

- 1) Fund financial statements. For the fiscal year ended June 30, 2008, financial statements are presented for the funds administered by the ASRS. These fiduciary funds are used to account for resources held for the benefit of the ASRS members.
  - The Combined Statement of Plan Net Assets is presented as of June 30, 2008 with combined total comparative information as of June 30, 2007. This financial statement reflects the resources available to pay benefits to members, including retirees and beneficiaries, at the end of the fiscal year.
  - The Combined Statement of Changes in Plan Net Assets is presented for the year ended June 30, 2008 with comparative information for the year ended June 30, 2007. This statement reflects the changes in resources available to pay benefits to retirees and other beneficiaries for the year.
- 2) Notes to the Basic Financial Statements. The notes to the Basic Financial Statements provide additional information that is essential to a full understanding of the data provided in the basic financial statements. The notes to the basic financial statements can be found on pages 32-49 of this report.
- 3) Required Supplementary Information. The required supplementary information consists of two schedules and related notes concerning actuarial information, funded progress and required contributions of the defined benefit pension systems administered by the ASRS.
- 4) Additional Supplementary Schedules. These schedules include a Combining Schedule of Net Assets and Changes in Net Assets for the ASRS Plan and System retirement programs, detailed information about additions and deductions, administrative expenses incurred by the ASRS administered funds,

and professional consultant fees and investment income and expenses by manager. The ASRS Plan, a defined benefit plan, and the System, a defined contribution plan, are separate components administered within the same pension plan.

### Financial Analysis of the ASRS Funds

The ASRS administers retirement, health and long term disability benefits for teachers and state, county and other public municipal employees. ASRS benefits are funded by member and employer contributions and by earnings on investments. The ASRS has three funds, Retirement, Health Benefit Supplement (HBS) and Long Term Disability (LTD), to which the contributions are distributed according to actuarially determined contribution rates.

**Plan Net Assets.** The total ASRS net assets held in trust for benefits at June 30, 2008 were \$26.1 billion, a 8.5 percent decrease from \$28.5 billion at June 30, 2007. The decrease in net assets is primarily due to negative returns in the global securities markets during the fiscal year. The retirement fund net assets were \$24.7 billion compared to \$27.1 billion last year, a 8.7 percent decrease. The HBS fund net assets were \$1.1 billion at year end compared to \$1.2 billion in FYE 2007, a 6.4 percent decrease. The LTD fund net assets were \$245.2 million at year end compared to \$243.0 million last year, a 0.7 percent increase.

Net investments totaled \$26.0 billion at FYE 2008 compared to \$28.3 billion at FYE 2007. The 8.1 percent decrease was primarily due to negative returns in the global securities markets. Cash, receivables and prepaids of \$2.2 billion reflect a 4.2 percent decrease compared to last year's \$2.3 billion and is primarily due to a decrease in prepaid benefits. Liabilities of \$6.7 billion represents an increase of 4.9 percent compared to \$6.4 billion last year. This is due to an increase in forward contracts payable.

## Management's Discussion and Analysis

**Changes in Net Assets.** For the 2008 fiscal year, employer and member contributions totaled \$1.8 billion, a 11.5 percent increase over the 2007 fiscal year contributions of \$1.6 billion. This is primarily attributed to an increase in the contribution rate effective July 1, 2007.

For FY 2008, the ASRS recognized net investment losses of \$2.1 billion which compares to net investment income of \$4.3 billion in the previous year. This 148.8 percent decrease in investment income is due to negative returns in the global equity markets during the fiscal year.

Deductions from the ASRS net assets held in trust for benefits consist primarily of pension, disability, health insurance and survivor benefits, member refunds and administrative expenses. For the 2008 fiscal year, pension, disability, health insurance and

survivor benefits totaled \$1.9 billion, an increase of 6.6 percent over the \$1.8 billion paid during FY 2007. Pension payments totaled \$1.8 billion in FY 2008 compared to \$1.6 billion in the previous year. The 7.1 percent increase is explained by a 10.8 percent net increase in retirees. Refunds and transfers to other plans totaled \$281.6 million dollars in 2008, a 220 percent increase from the \$88 million paid out in 2007. The increase was due to a group of employees which was transferred by joinder agreement to another public employee retirement system. For FY 2008, the cost of administering the ASRS benefits totaled \$33.2 million, a decrease of 1.2 percent from the \$33.6 million paid in FY 2007. This decrease is a result of a reduction in programming costs related to IT projects. The following tables show the principal ASRS net assets and changes in net assets for fiscal years 2008 and 2007, in thousands of dollars:

### Net Assets - ASRS

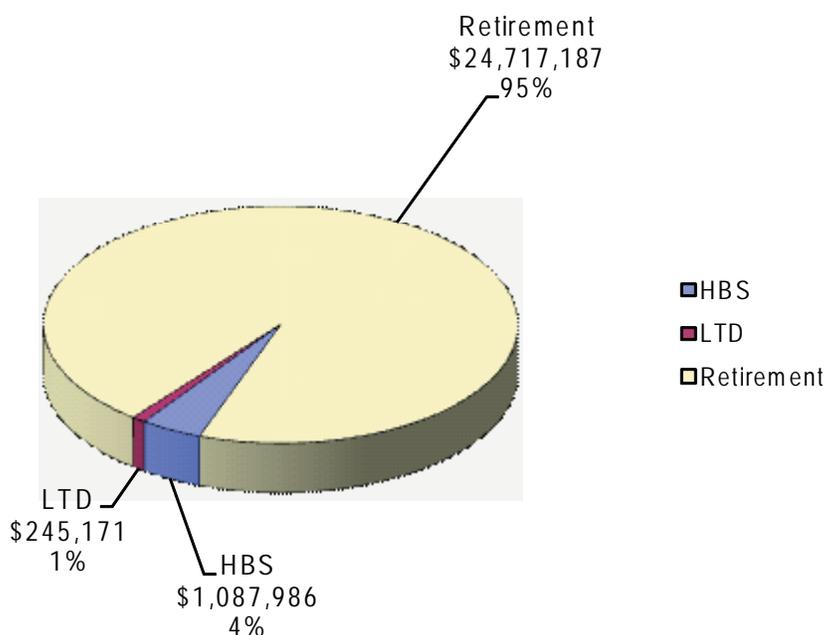
Assets	2008	2007	Change	% Change
Cash, receivables and prepaids	\$2,202,266	\$2,297,724	\$(95,458)	-4.2%
Investments at fair value	26,734,049	29,003,567	(2,269,518)	-7.8
Security lending	3,794,246	3,543,247	250,999	7.1
Total assets	32,730,561	34,844,538	(2,113,977)	-6.1
<b>Liabilities</b>				
Payables for investments	2,885,971	2,825,294	60,677	2.1
Securities Lending	3,794,246	3,543,247	250,999	7.1
Total Liabilities	6,680,217	6,368,541	311,676	4.9
<b>Total Net Assets</b>	<b>\$26,050,344</b>	<b>\$28,475,997</b>	<b>\$(2,425,653)</b>	<b>-8.5%</b>

## Management's Discussion and Analysis

### Change in Net Assets - ASRS

	2008	2007	Change	% Change
<b>ADDITIONS</b>				
Member contributions	\$ 904,984	\$ 811,480	\$ 93,504	11.5%
Employer contributions	905,680	811,535	94,145	11.6
Service credit purchase and transfers in	95,226	107,548	( 12,322)	-11.5
Investment and security lending income	(1,854,805)	4,512,326	( 6,367,131)	-141.1
Investment and security lending expense	( 217,636)	( 201,808)	( 15,828)	7.8
Total additions	( 166,551)	6,041,081	( 6,207,632)	-102.8
<b>DEDUCTIONS</b>				
Benefits	1,921,635	1,803,275	118,360	6.6
Survivor benefits	22,648	21,590	1,058	4.9
Refunds and transfers	281,563	88,027	193,536	219.9
Administration and other	33,256	37,586	( 4,330)	-11.5
Total deductions	2,259,102	1,950,478	308,624	15.8
<b>NET CHANGE</b>	(2,425,653)	4,090,603	( 6,516,256)	-159.3
Net assets beginning of year	28,475,997	24,385,394	4,090,603	16.8
Net assets end of year	\$26,050,344	\$28,475,997	\$(2,425,653)	-8.5%

### Net Assets by Fund - June 30, 2008



## Management's Discussion and Analysis

**Funded Status.** Actuarial valuations of the ASRS assets and benefit obligations for the retirement and health benefit supplement funds combined are performed annually. The most recent actuarial valuation available is as of June 30, 2007.

At June 30, 2007 the total funded status of the ASRS retirement and health benefit supplement funds decreased to 82.8 percent from 83.7 percent at FYE 2006. At FYE 2007 ASRS actuarial liabilities exceeded actuarial assets for the retirement and health benefit supplement funds by \$5.5 billion. This compares to an excess of actuarial liabilities over actuarial assets of \$4.8 billion at FYE 2006. This decrease in funded status is related primarily to recognition of investment losses in fiscal years 2002 and 2003 and to a change in actuarial assumptions.

**Investments.** During the FY 2008, the ASRS funds remained broadly diversified with investments in domestic and international equities, domestic fixed income, real estate and cash equivalent securities. According to statutory restrictions, no more than 80 percent of the fund may be allocated to domestic and international equity securities, and no more than 30 percent of the fund may be allocated solely to international equity securities.

The Retirement and HBS funds are combined in commingled investment pools. Investments for each fund are allocated daily via a constant dollar unitization methodology. Realized and unrealized gains are allocated monthly using the same methodology. The LTD investments are held in a separate fund.

At June 30, 2008, the ASRS held total investments of \$26.0 billion, a decrease of \$2.3 billion from FY 2007. The decrease in total investments is primarily due to negative conditions in the global securities markets. The combined investment portfolio experienced a return of -7.6 percent compared to the Interim Total Fund Benchmark return of -5.6 percent. The ASRS underperformance is largely related to international equity selections, fixed

income underweight, international equity small cap strategic allocation, the real estate J-Curve effect and investment in REITS.

At June 30, 2008, the ASRS held \$13.1 billion in domestic equities and \$4.4 billion in international equities, a decrease of 17.6 percent in domestic equities and an 19.7 percent increase in international equities from FY 2007. Market performance accounts for the changes in values. The FY 2008 rate of return for ASRS domestic equities was -12.6 percent compared to 19.8 percent in FY 2007 reflecting negative conditions in the domestic equity markets. The ASRS domestic equities benchmark, comprised of a custom combination of S&P 400, S&P 500 and the S&P 600, had a return of -12.6 percent for FY 2008.

The FY 2008 rate of return for ASRS international equities was -10.9 percent compared to 27.9 percent in FY 2007, reflecting negative conditions in the international equity markets. The ASRS international equities benchmark, MSCI ACWI EX-US, had a rate of return of -6.2 percent for FY 2008. The benchmarks for both domestic and international equities are representative of the returns that could be expected in a similar investing environment. The ASRS underperformed in international equities largely as a result of the stock selections of its external portfolio managers.

At June 30, 2008, the ASRS held \$6.8 billion in domestic fixed income securities, an increase of \$500 million from FY 2007. Market performance accounts for the change in values. The rate of return was 6.6 percent compared to 6.1 percent in the previous year, reflecting an increase in performance in the fixed income markets. The ASRS domestic fixed income benchmark, the Lehman Aggregate, had a rate of return of 7.1 percent for FY 2008. This benchmark is representative of the returns that could be expected in a similar investing environment. ASRS under performance can largely be attributed to having less exposure to Treasuries which were the strongest performing sector.

## **Management's Discussion and Analysis**

At June 30, 2008, the ASRS held \$513.9 million in real estate assets, an increase of \$258.5 million (after reclassification of 2007 real estate values to conform with the 2008 real estate presentation) from FY 2007. The rate of return was -9.3 percent compared to a 19.7% return in FY 2007, a 29% decrease. The ASRS real estate benchmark, the NCREIF Property Index (NPI) +100bps, had a rate of return of 14.6 percent for FY 2008. This benchmark is representative of the returns that could be expected in a similar investing environment. The ASRS underperformed in real estate largely due to the fact that its real estate program is relatively young and has a significant allocation to REITS which are value daily and therefore are more indicative of underlying valuations. Large initial capital commitments and up front fees negatively impact short term comparison to the benchmark.

The ASRS earns additional investment income by lending investment securities to brokers. This is done on a pooled basis by our custodial bank, Mellon Trust. The brokers provide collateral and generally use the borrowed securities to cover short sales and failed trades. Security lending income for FY 2008 was \$22.8 million compared to \$6.9 million for FY 2007. The 231.9% increase in security lending income is a result of larger demand for asset borrowing and increased spreads.

### **Current Market Conditions**

World markets continue to experience large daily fluctuations due to worldwide capital market and economic uncertainty. Between June 30, 2008 and November 18, 2008, ASRS investments have declined by approximately 26%. A sustained loss of that magnitude will have the affect of reducing the July 1, 2009 actuarially determined funded status of the ASRS retirement and health benefit supplement funds and significantly reducing the market value funded status of the retirement and health benefit supplement funds for the same period. In addition, the combined pension and health insurance contribution rates would steadily increase for future years beginning July 1, 2010 unless future returns offset the fiscal year 2009 year-to-date returns. In order to mitigate losses, ASRS internal staff and its Global Tactical Asset Allocation managers are reviewing investments under their management (approximately 43% of the ASRS Total Fund) and rebalancing as appropriate.

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Additional information is available upon request. Please direct your request to the ASRS Financial Services Division, 3300 North Central Ave., Phoenix, AZ 85012.

## Basic Financial Statements

### Combined Statement of Plan Net Assets

June 30, 2008 with Comparative Totals for 2007

(Dollars in Thousands)

	Retirement Fund	Health Benefit Supplement Fund (Note 8)	Long-Term Disability Fund (Note 8)	2008 Combined	2007
<b>ASSETS:</b>					
Cash (Note 3)	\$23,304	\$2,430	\$7,061	\$32,795	\$23,709
Prepaid benefits	-	-	-	-	129,917
<b>RECEIVABLES:</b>					
Accrued interest & dividends	70,089	3,077	-	73,166	58,741
Securities sold (Note 3)	413,991	18,177	-	432,168	692,310
Forward contracts (Note 5)	1,532,416	67,283	-	1,599,699	1,343,784
Contributions (Note 7)	49,956	3,076	2,910	55,942	39,965
Due from other funds	-	-	-	-	1,917
Other	5,966	170	2,360	8,496	7,381
Total receivables	2,072,418	91,783	5,270	2,169,471	2,144,098
<b>INVESTMENTS AT FAIR VALUE (Note 3)</b>					
Temporary investments	1,574,989	63,786	3,003	1,641,778	2,598,595
Temporary investments from securities lending collateral (Note 4)	3,634,660	159,586	-	3,794,246	3,543,247
U. S. government obligations	4,176,962	180,597	34,448	4,392,007	4,066,661
Corporate bonds	2,339,164	101,810	25,102	2,466,076	2,176,544
Common and preferred stocks	16,606,103	737,950	170,509	17,514,562	19,906,426
Real estate	492,432	21,429	-	513,861	255,341
Private equity	123,817	5,522	-	129,339	-
Opportunistic investments	73,239	3,187	-	76,426	-
Total investments	29,021,366	1,273,867	233,062	30,528,295	32,546,814
<b>TOTAL ASSETS</b>	<b>31,117,088</b>	<b>1,368,080</b>	<b>245,393</b>	<b>32,730,561</b>	<b>34,844,538</b>
<b>LIABILITIES:</b>					
Payable for securities purchased (Note 3)	1,193,051	52,383	-	1,245,434	1,449,060
Payable for securities lending collateral (Note 4)	3,634,660	159,586	-	3,794,246	3,543,247
Forward contracts payable (Note 5)	1,540,759	67,650	-	1,608,409	1,347,884
Due to Other funds	-	-	-	-	1,917
Other	31,431	475	222	32,128	26,433
Total liabilities	6,399,901	280,094	222	6,680,217	6,368,541
<b>NET ASSETS HELD IN TRUST FOR PENSION/OPEB BENEFITS:</b>	<b>\$24,717,187</b>	<b>\$1,087,986</b>	<b>\$245,171</b>	<b>\$26,050,344</b>	<b>\$28,475,997</b>

(A Schedule of Funding Progress is presented on page 50)  
The accompanying notes are an integral part of these statements.

## Basic Financial Statements

### Combined Statement of Changes in Plan Net Assets

For the Year Ended June 30, 2008 with Comparative Totals for 2007

(Dollars in Thousands)

	Retirement Fund	Health Benefit Supplement Fund (Note 8)	Long-Term Disability Fund (Note 8)	2008	Combined 2007
<b>ADDITIONS (REDUCTIONS)</b>					
Contributions:					
Member contributions (Note 7)	\$857,813	\$-	\$47,171	\$904,984	\$811,480
Employer contributions (Note 7)	759,482	99,027	47,171	905,680	811,535
Transfers from other plans	5,196	-	-	5,196	9,685
Member reimbursements	90,030	-	-	90,030	97,863
<b>Total Contributions</b>	<b>1,712,521</b>	<b>99,027</b>	<b>94,342</b>	<b>1,905,890</b>	<b>1,730,563</b>
Income (Loss) from investment activities:					
Net appreciation (depreciation) in fair value	(2,511,535)	(112,026)	(22,339)	(2,645,900)	3,704,316
Interest	254,353	11,339	122	265,814	303,150
Dividends	313,367	13,978	9	327,354	272,782
Real estate	22,769	1,016	-	23,785	75,344
Private equity	2,849	129	-	2,978	-
Other	11,070	515	585	12,170	7,954
<b>Total income (loss) from investment activities</b>	<b>(1,907,127)</b>	<b>(85,049)</b>	<b>(21,623)</b>	<b>(2,013,799)</b>	<b>4,363,546</b>
Less investment activity expenses:					
Management fees and monitoring services (publically traded)	48,212	2,151	-	50,363	44,380
Real estate expense	22,702	1,013	-	23,715	15,511
Private equity expense	7,022	319	-	7,341	-
<b>Total investment activity expenses</b>	<b>77,936</b>	<b>3,483</b>	<b>-</b>	<b>81,419</b>	<b>59,891</b>
<b>Net income (loss) from investment activities</b>	<b>(1,985,063)</b>	<b>(88,532)</b>	<b>(21,623)</b>	<b>(2,095,218)</b>	<b>4,303,655</b>
From securities lending activities (Note 4):					
Security loan program	152,205	6,789	-	158,994	148,780
Security loan interest expense	130,401	5,816	-	136,217	141,917
<b>Net income from securities lending activities</b>	<b>21,804</b>	<b>973</b>	<b>-</b>	<b>22,777</b>	<b>6,863</b>
<b>Total net investment income (loss)</b>	<b>(1,963,259)</b>	<b>(87,559)</b>	<b>(21,623)</b>	<b>(2,072,441)</b>	<b>4,310,518</b>
<b>TOTAL ADDITIONS (REDUCTIONS)</b>	<b>(250,738)</b>	<b>11,468</b>	<b>72,719</b>	<b>(166,551)</b>	<b>6,041,081</b>
<b>DEDUCTIONS</b>					
Retirement and disability benefits	1,768,219	85,132	68,284	1,921,635	1,803,275
Survivor benefits	22,648	-	-	22,648	21,590
Refunds to withdrawing members, including interest	104,387	-	-	104,387	77,910
Administrative expenses	29,195	1,282	2,750	33,227	33,662
Transfers to other plans	177,176	-	-	177,176	10,117
Other	8	21	-	29	3,924
<b>TOTAL DEDUCTIONS</b>	<b>2,101,633</b>	<b>86,435</b>	<b>71,034</b>	<b>2,259,102</b>	<b>1,950,478</b>
<b>NET INCREASE (DECREASE)</b>	<b>(2,352,371)</b>	<b>(74,967)</b>	<b>1,685</b>	<b>(2,425,653)</b>	<b>4,090,603</b>
<b>NET ASSETS HELD IN TRUST FOR PENSION/OPEB BENEFITS:</b>					
Beginning of year	27,069,558	1,162,953	243,486	28,475,997	24,385,394
End of year	\$24,717,187	\$1,087,986	\$245,171	\$26,050,344	\$28,475,997

The accompanying notes are an integral part of these statements.

## Notes to the Basic Financial Statements

### 1. Description of the System

**Organization** – The Arizona State Retirement System (ASRS) is a component unit of the State of Arizona. The ASRS is a cost-sharing, multiple-employer, defined benefit pension plan established by the State of Arizona to provide pension benefits for employees of the State and employees of participating political subdivisions and school districts. The ASRS is administered in accordance with Title 38, Chapter 5 of the Arizona Revised Statutes (A.R.S.).

The ASRS administers the Arizona State Retirement System (the System, a defined contribution plan) and the Arizona State Retirement Plan (the Plan, a defined benefit plan). The System and Plan are separate components of the same pension plan. The System was established by the Arizona Legislature in 1953 to provide retirement and other benefits for state employees and teachers, together with employees of political subdivisions that elected coverage. In 1943, the Legislature had established the Arizona Teachers' Retirement System (the Teachers' System) to provide benefits for teachers. After the establishment of the ASRS, teachers who were, or later became, eligible through employment to be covered by the ASRS were transferred to the System. The Teachers' System then became inactive, except for continuation of retirement benefits already being paid and obligations to teacher members who did not become eligible for the ASRS.

The Plan, enacted by the Legislature in 1970, became effective July 1, 1971. Effective July 1, 1981, all non-retired members of the System became members of the Plan as prescribed by Laws of 1980, Chapter 238.

A.R.S. 38-783 and A.R.S. 38-797 require separate accounts be established for health insurance

premium benefits and long-term disability benefits, respectively. Effective July 1, 1995, the ASRS has established an account for each benefit program and has reported those funds in the basic financial statements. Both the Health Benefit Supplement Fund (HBS) and the Long-Term Disability Fund (LTD) are benefit cost-sharing, multiple-employer post-employment benefit plans. Although the assets of the HBS Fund are commingled with assets of the Retirement Fund, each plan's assets may be used only for the payment of benefits to the members of that plan, in accordance with the terms of the plan.

**Reporting Entity** – The financial statements of the ASRS include the financial activities of all the above funds. The ASRS Retirement Board of Trustees (the Board), appointed by the governor and confirmed by the Arizona State Senate, oversees the ASRS.

**Contributions** – Participating employers and their employees contribute percentages of employees' salaries for retirement annuities, survivor annuities, health insurance supplements and long term disability in accordance with Arizona Revised Statutes. Employee contributions are excluded from gross income for federal and state income tax purposes. Employers collect contributions from the employees, add their matching share and remit the total amounts to the Plan.

State statutes allow the purchase of eligible service credit for which no benefit could be paid by another qualified plan. Purchasable services include military service, leave of absence, previously forfeited service under ASRS and other public service employment.

## Notes to the Basic Financial Statements

At June 30, 2008 and June 30, 2007, the number of participating employers and employees totaled:

<b>EMPLOYER UNITS:</b>	<b>2008</b>	<b>2007</b>
School Districts	235	235
Charter Schools	159	172
Cities and Towns	77	76
Counties	15	15
Special Districts	86	85
Community College Districts	10	10
Universities	3	3
State Government	1	1
<b>TOTAL</b>	<b>586*</b>	<b>597</b>
<b>EMPLOYEE MEMBERS:</b>		
Retirees (including Beneficiaries)	92,673	83,603
Non Active Fully Vested	223,497	209,667
Long-Term Disability recipients	4,957	4,976
<b>CURRENT EMPLOYEES:</b>		
Active	227,730	224,766
<b>TOTAL</b>	<b>548,857</b>	<b>523,012</b>

\* The 586 Employer Reporting Units represent 734 total employers. Of the retirees and LTD recipients noted above, 55,908 are receiving health insurance premium benefits.

Costs of administering the funds are financed through contributions, state appropriations and investment earnings of the funds.

**Benefits** – The Plan provides benefits under formulas and provisions described in Arizona state law. Benefits and administrative expenses are paid from funds contributed by members and employers and from earnings on the invested funds. The Plan provides for retirement, disability, health insurance premium supplemental benefits, and survivor benefits.

Retirement benefits are calculated on the basis of

age, average monthly compensation, and service credit, which is established on a fiscal year basis (July 1 to June 30). Members are eligible for full retirement benefits on (a) their 65th birthday, (b) their 62nd birthday and completion of at least 10 years of credited service, or (c) the first day that the sum of their age plus total credited service equals 80. The benefit is based on a percentage of average monthly compensation multiplied by the years of service credit. Persons who attain age 50 with at least five years of total credited service may take an early retirement, but the amount of their retirement benefit is actuarially reduced.

## Notes to the Basic Financial Statements

The percentage of average monthly compensation varies with years of service credit according to the following schedule:

- 0-19.99 years – 2.1 percent
- 20-24.99 years – 2.15 percent
- 25-29.99 years – 2.2 percent
- 30 or more years of service - 2.3 percent

Average monthly compensation is defined as the period of 36 consecutive months during which a participant receives the highest compensation within the last 120 months of service during which the employee made retirement contributions as required by law. The compensation does not include lump sum payments on termination of employment for accumulated vacation or annual leave, sick leave, compensatory time or any other form of termination pay. Members who began participation in the Plan prior to January 1, 1984, may choose to have average monthly compensation determined based upon the period of 60 consecutive months during which the member receives the highest compensation within the last 120 months of service, including lump sum payments as described above. Persons who attain age 50 with at least five years of total credited service may take an early retirement, but the amount of their retirement benefit is actuarially reduced.

Effective July 1, 1988, members of the ASRS are eligible for a Long Term Disability (LTD) benefit in the event they become unable to perform their work. The monthly benefit is equal to two-thirds of their monthly earnings. Participants continue to earn service credit up to their normal retirement dates. Members with LTD commencement dates after June 30, 1999 are limited to 30 years of service or the service on record as of the effective disability date if their service is higher than 30 years.

The Retiree Group Insurance Program offers health insurance coverage for retired and disabled members who are no longer covered by insurance

administered by their former member employers. Commencing January 1, 1989, retired and disabled members of ASRS became eligible for the Health Insurance Premium Supplement Benefit Program. A detailed explanation of both programs is presented in the additional benefits section (Note 8).

**Termination** – Upon termination of employment, members can elect to receive all of their contributions made to the Plan, plus accrued interest at 4 percent. Members can receive a percentage of employer contributions to the plan based on years of service as follows:

- 5 to 5.9 years of service - 25 percent of employer contributions
- 6 to 6.9 years of service - 40 percent of employer contributions
- 7 to 7.9 years of service - 55 percent of employer contributions
- 8 to 8.9 years of service - 70 percent of employer contributions
- 9 to 9.9 years of service - 85 percent of employer contributions
- 10 or more years of service - 100 percent of employer contributions

Withdrawal of such accumulated contributions results in forfeiture of the member's accrued benefits in the Plan; however, state law provides for reinstatement of a member's forfeited service upon repayment of the accumulated contributions plus interest if a former member returns to covered service.

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## Notes to the Basic Financial Statements

### 2. Summary of Significant Accounting Policies

**Basis of Accounting** – The financial statements are prepared using the accrual basis of accounting under which expenses are recorded when the liability is incurred and revenues are recorded in the accounting period in which they are earned and become measurable. Employee contributions are recognized in the period in which contributions are due. Employer contributions are recognized when due and the employer has made a formal commitment to provide the contributions. Contributions from employees and employers for service through June 30 are accrued. These contributions are considered to be fully collectible and, accordingly, no allowance for uncollectible receivables is reflected in the financial statements.

Benefit and refund payments are recognized when due and payable in accordance with the terms of the retirement health benefit supplement and long-term disability plan.

Investment income derived from publically traded investments is recognized when earned investment and other expenditures are recorded when incurred. Investment income and expenses derived from private investments is recognized on a quarterly lag .

**Investments** – Investments include U.S. government and government agency obligations, real estate, corporate bonds, and equity obligations, derivatives, real estate partnerships, private equity and opportunistic investments.

Publically traded investments are reported at fair values determined by the custodial agents. The agent's' determination of fair values includes, among other things, using pricing services or prices quoted by independent brokers at current exchange rates. The ASRS invests in two types of derivatives, currency forward contracts and futures contracts. The fair value of currency forward contracts is determined by interpolating the spot rate and the

forward rates based upon number of days to maturity. The interpolated rate is used to determine the unrealized gain/loss at the valuation date. The fair value of futures contracts is determined by calculating the difference between the closing Bloomberg market price on valuation date and the original futures trade price. Futures are settled daily. The fair value of real estate investments directly owned by the ASRS are based on independent appraisals. Real Estate, Private Equity and Opportunistic partnership investments are valued based on the partnerships financial statements and cash flows.

Short-term investments are reported at cost plus accrued interest, which approximates fair value. For investments where no readily ascertainable fair value exists, management, in consultation with their investment advisors, has determined the fair values for the individual investments based on anticipated maturity dates and current interest rates commensurate with the investment's degree of risk.

Security transactions and any resulting gains or losses are accounted for on a trade date basis.

Net investment income (loss) includes net appreciation (depreciation) in the fair value of investments, interest income, dividend income, income from Real Estate and Private Partnerships and total investment expense, which includes investment management and custodial fees and all other significant investment related costs.

There are certain market risks, credit risks, liquidity risks, foreign currency exchange risks, and event risks which may subject ASRS to economic changes occurring in certain industries, sectors, or geographies.

HBS and retirement investments are pooled. Investments for each fund are allocated daily via a constant dollar unitization methodology. Realized and unrealized gains are allocated monthly using the same methodology.

## Notes to the Basic Financial Statements

**Capital Assets** – The ASRS does not record property and equipment (principally office furniture and fixtures) as assets, but includes the cost of such items in administrative expenditures in the year purchased due to the insignificant total cost.

**Federal Income Tax Status** – During the year ended June 30, 2008, the ASRS qualified under Section 401(a) of the Internal Revenue Code (IRC) and was exempt from federal income taxes under Section 501(a) of the IRC.

**Actuarial Valuation** – The information included in the required supplemental schedules is based on the actuarial valuations performed as of June 30, 2007, which is the latest available information. Significant actuarial assumptions used in the valuations are included in the notes to the required supplemental schedules.

**Use of Estimates** – The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and changes therein, disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

**Comparative Data** – The accompanying financial statements include certain prior-year summarized comparative information in total but not by fund. Such information should be read in conjunction with the ASRS' financial statements for the year ended June 30, 2007, from which the summarized information was derived. Certain 2007 real estate investment, income and expense amounts have been reclassified to conform to the 2008 presentation.

**New Accounting Pronouncements** – The ASRS implemented GASB Statement No. 50, Pension Disclosures, for the year ended June 30, 2008. GASB Statement No. 50 requires pension plans and employers to change disclosures so the financial reporting is more closely aligned with the financial requirements for other postemployment benefits.

### 3. Cash And Investments

**Cash** – Cash deposits are subject to custodial risk. Custodial risk is the risk that in the event of a bank failure, ASRS's deposits may not be returned to it. Arizona state statutes do not require ASRS deposits to be covered by collateralized. The board has not adopted a more restrictive policy. The FDIC insures ASRS cash deposits up to \$100,000 per member based on the ratio of the member's account balance to the ASRS net assets.

**Investments** – Investments are subject to a number of risks including custodial credit risk, concentration of credit risk, credit quality risk, interest rate risk and foreign currency risk. Statutes enacted by the Arizona State Legislature (the Statutes) authorize the ASRS to make investments in accordance with the "Prudent Person" rule. Section 38-719 (B) of the Arizona Revised Statutes interprets the rule to be that investment management shall discharge the duties of their position with the care, skill, prudence and diligence, under the circumstances then prevailing, that a prudent person acting in enterprise of a like character and with like aims as that of the system, subject to certain statutory limitations and restrictions. Within this broad framework, the ASRS has chosen to invest in short-term securities, obligations of the U.S. government or agencies of the U.S. government, corporate bonds, common and preferred stocks (domestic and foreign), mortgages, and real estate, private equity and opportunistic investments.

## Notes to the Basic Financial Statements

The Statutes place the following restrictions on the ASRS' investment fund portfolio:

1. No more than 80 percent of the ASRS' total assets may be invested at any given time in corporate stocks or equity equivalents, based on cost value of the stocks or equity equivalents irrespective of capital appreciation.
2. No more than 5 percent of the ASRS' assets may be invested in securities issued by any one institution, agency or corporation, other than securities issued as direct obligations of or fully guaranteed by the U.S. government or mortgage backed securities and agency debentures issued by federal agencies.
3. No more than 5 percent of the voting stock of any one corporation may be owned.
4. No more than 30 percent of the ASRS' assets may be invested in foreign equity securities, and those investments shall be made only by investment managers with demonstrated expertise in such investments.
5. No more than 10 percent of the ASRS' assets may be invested in bonds or other evidences of indebtedness of those multinational development banks in which the United States is a member nation, including the International Bank for Reconstruction and Development, the African Development Bank, the Asian Development Bank, and the Inter-American Development Bank.
6. No more than 1 percent of ASRS assets may be invested in economic development projects authorized as eligible for such investment by the Arizona State Department of Commerce.

The Board has not formally adopted more restrictive policies for the various types of risks. The Management of ASRS believes it has complied with the above guidelines. Management does expect the money managers to abide by contract requirements much more restrictive than the statute.

Due to the flow of securities to and from transfer agents and the security lending program, securities occasionally cannot be delivered for a sale or received for a purchase, resulting in a "failed" transaction. Securities with trade dates in June and settlement dates in July result in "outstanding" transactions. Since these securities have contractually changed ownership, receivables and payables result from these transactions. Such transactions resulted in a receivable for securities sold of \$432 million and a payable for securities purchased of \$1.25 billion at June 30, 2008.

**Custodial Credit Risk:** For an investment, custodial credit risk is the risk that, in the event of a failure of a counter party, the ASRS will not be able to recover the value of its investment or the collateral securities that are in the possession of an outside party. All securities are registered in the name of the ASRS including loaned securities.

**Concentration of Credit Risk:** Concentration of credit risk is the risk of substantial loss if investments are concentrated in one issuer. Arizona state statute requires that no more than 5 percent of the assets can be invested in one issuer, except for the US government and its agencies. The Board has not adopted a more restrictive policy. No investments, other than short term mutual funds, account for 5 percent or more of their the ASRS assets.

## Notes to the Basic Financial Statements

The following table shows the investments by investment type:

### INVESTMENTS

at June 30, 2008

(Dollars in Thousands)

Investment	Retirement HBS	LTD Fair Value	2008
Temporary Investments including US TB's	\$1,633,105	\$3,003	\$1,636,108
Foreign Bonds including Temporary Investments	5,670	-	5,670
Total Temporary Investments	1,638,775	3,003	1,641,778
Corporate Bonds	2,440,974	25,102	2,466,076
Domestic Common and Preferred Stock	12,943,685	170,509	13,114,194
Foreign Common and Preferred Stock	4,400,368	-	4,400,368
Total Common and Preferred Stock	17,344,053	170,509	17,514,562
US Government Obligations	3,255,754	34,448	3,290,202
US Agency Obligations	1,101,805	-	1,101,805
Total US Government Obligations	4,357,559	34,448	4,392,007
Real Estate Mortgages & Contracts	513,861	-	513,861
Private Equity Investments	129,339	-	129,339
Opportunistic Investments	76,426	-	76,426
U. S. Government Obligations	332,158	-	332,158
U. S. Agency Obligations	192,113	-	192,113
Corporate Obligations – Domestic	40,696	-	40,696
Preferred and Common Stock- Domestic	2,776,184	-	2,776,184
Preferred and Common Stock –Foreign	453,095	-	453,095
Total Securities Lending Obligations	3,794,246	-	3,794,246
TOTAL INVESTMENTS AT FAIR VALUE	30,295,233	233,062	30,528,295
Short Term Investment Receivables	2,108,961	-	2,108,961
Short Term Investment Payables	6,659,158	-	6,659,158
INVESTMENTS AT FAIR VALUE - NET	<u>\$25,745,036</u>	<u>\$233,062</u>	<u>\$25,978,098</u>

## Notes to the Basic Financial Statements

**Credit Quality Risk:** Credit quality risk is the risk that the issuer will not fulfill its obligations to the purchaser of its debt instruments. Arizona state statutes are not specific as to the credit ratings of the investments of the ASRS. The statutes

require the Prudent Person Rule. The Board has not adopted a formal policy on credit ratings. The present management policy is to set standards for each portfolio manager based on an assessment of their expertise.

The following table presents the fixed income investments at June 30, 2008 categorized to give an indication of the level of risk assumed by ASRS:

**DEBT SECURITIES  
CREDIT QUALITY RISK (FIXED INCOME SECURITIES)**

At June 30, 2008  
(Dollars in Thousands)

Investment	Fair Value	AAA	AA	A	BBB	BB	B	Not Rated
Asset Backed Securities	\$ 154,132	\$ 139,545	\$ 3,575	\$ 9,389	\$ 1,007	\$ 3	\$ 613	\$ -
Commercial Mortgage Backed Securities	423,709	414,042	1,499	1,122	-	-	7,046	-
Corporate Bonds	1,692,490	211,140	284,859	613,134	246,768	14,999	313,619	7,971
Non-Government Backed CMO's	195,745	195,547	109	46	4	-	-	39
<b>Total Corporate Bonds</b>	<b>2,466,076</b>	<b>960,274</b>	<b>290,042</b>	<b>623,691</b>	<b>247,779</b>	<b>15,002</b>	<b>321,278</b>	<b>8,010</b>
Government Agencies	963,399	897,174	30,299	19,532	1,168	1,309	13,715	202
Government Agencies CMO	138,406	138,385	21	-	-	-	-	-
Government Bonds	1,118,674	1,110,108	681	1,277	40	-	-	6,568
Government Mortgage Backed	2,171,528	2,171,405	-	-	-	-	-	123
<b>Total Government Bonds</b>	<b>4,392,007</b>	<b>4,317,072</b>	<b>31,001</b>	<b>20,809</b>	<b>1,208</b>	<b>1,309</b>	<b>13,715</b>	<b>6,893</b>
<b>Total Debt Securities</b>	<b>\$6,858,083</b>	<b>\$5,277,346</b>	<b>\$321,043</b>	<b>\$644,500</b>	<b>\$248,987</b>	<b>\$16,311</b>	<b>\$334,993</b>	<b>\$14,903</b>

## Notes to the Basic Financial Statements

**Interest Rate Risk:** Interest rate risk is the risk that debt securities will lose value due to rising interest rates. Arizona state statutes are silent regarding interest rate risk. The Board has not adopted a specific formal policy for the interest rate risk. It does set more restrictive requirements in its contracts with money managers. The Arizona State Retirement System uses effective duration to

identify and manage its interest rate risk. Effective duration measures the expected change in value of a fixed income security for a given change in interest rate. The method takes into account the likely timing and amounts of variable cash flows for bonds with call options and prepayment provisions.

The following table shows the effective duration by investment type:

<b>Interest Rate Risk</b> at June 30, 2008 (Dollars in Thousands)		
<b>INVESTMENT</b>	<b>FAIR VALUE</b>	<b>EFFECTIVE DURATION</b> (in years)
<b>Domestic Fixed Income Investments</b>		
Asset Backed Securities	\$154,132	3.1
Commercial Mortgage Backed Securities	423,709	3.9
Corporate Bonds	1,692,490	3.8
Non-Government Backed CMO's	195,745	2.7
<b>Total Corporate Bonds</b>	<b>2,466,076</b>	
Government Agencies	963,399	3.9
Government Agencies CMO	138,406	3.9
Government Bonds	1,118,674	3.0
Government Mortgage Backed	2,171,528	3.6
<b>Total Government Bonds</b>	<b>4,392,007</b>	
<b>Total Debt Securities</b>	<b>\$6,858,083</b>	

## Notes to the Basic Financial Statements

**Foreign Currency Risk:** Foreign currency risk is the risk that changes in the foreign exchange rate will adversely impact the fair value of an investment. The ASRS is allowed to invest part of its assets in foreign investments. According to Arizona state statutes, no more than 30 percent of ASRS assets may be invested in foreign equity securities

and the investments must be made by investment managers with expertise in those investments. The Board has not adopted a formal policy that is more restrictive. Management does have certain policies in the contracts with the money managers permitted to invest in foreign denominated securities.

The following table shows the System's exposure to foreign currency risk (U.S. dollars):

**Foreign Currency Risk**

At June 30, 2008  
(Dollars in Thousands)

Currency Type	Temporary Investments	Fixed Income	Equities	Real Estate	Private Equity	Total
Australian Dollar	\$2,815	\$-	\$98,308	\$-	\$-	\$101,123
British Pound Sterling	(768)	-	621,690	-	-	620,922
Canadian Dollar	(776)	-	23,458	-	-	22,682
Czech Koruna	-	-	6,018	-	-	6,018
Danish Krone	30	-	36,505	-	-	36,535
Euro Currency Unit	3,105	3,039	1,145,797	-	4,084	1,156,025
Hong Kong Dollar	(1,010)	-	62,714	32	-	61,736
Japanese Yen	11,083	-	815,235	-	-	826,318
Malaysian Ringit	-	-	622	-	-	622
New Mexican Peso	-	-	5,067	-	-	5,067
New Taiwan Dollar	-	-	16,003	-	-	16,003
New Zealand Dollar	314	2,884	10,860	-	-	14,058
Norwegian Krone	91	-	23,373	-	-	23,464
South African Comm Rand	-	-	13,050	-	-	13,050
Singapore Dollar	131	-	47,807	-	-	47,938
South Korean Won	-	-	24,664	-	-	24,664
Swedish Krona	36	-	47,407	-	-	47,443
Swiss Franc	700	-	320,785	-	-	321,484
Thailand Baht	-	-	1,233	-	-	1,233
<b>Total</b>	<b>\$15,751</b>	<b>\$5,923</b>	<b>\$3,320,596</b>	<b>\$32</b>	<b>\$4,084</b>	<b>\$3,346,386</b>

## Notes to the Basic Financial Statements

### 4. Securities Lending Program

Arizona Revised Statutes Section 38-715(D)(3) allows the ASRS to participate in a securities lending program. The ASRS' custodial bank enters into agreements with counterparts to loan securities and have the same securities redelivered at a later date. All securities are eligible for loan (U.S. fixed income securities, U.S. equities, international equities) with a higher percentage of U.S. Treasuries on loan than most other security types. The ASRS currently receives as collateral at least 102 percent of the market value of the loaned securities and maintains collateral at no less than 100 percent for the duration of the loan. At year-end, the ASRS had no credit risk exposure to borrowers because the amount the ASRS owes the borrowers exceeds the amount the borrowers owe the ASRS. Securities loaned are initially fully collateralized by cash (USD and Euro), irrevocable letters of credit, U.S. Government or Agency securities, or sovereign debt. Initial cash collateral may be reinvested (under certain constraints) in:

- a) instruments issued or fully guaranteed by the U.S. Government, Federal agencies, or sponsored agencies or sponsored corporations,
- b) instruments issued by domestic corporations including corporate notes and floating rate notes,
- c) obligations of approved domestic and foreign banks,
- d) U.S. dollar-denominated instruments issued by sovereigns, sovereign supported credits, and instruments of foreign banks and corporations,
- e) yankee securities,

- f) repurchase agreements,
- g) insurance company funding agreements, guaranteed investment contracts and bank investment contracts,
- h) asset-backed securities,
- i) money market mutual funds.

The ASRS records the cash collateral received and the same amount as an obligation for securities on loan. Any cash collateral received is invested in short-term investments. The maturities of the investments are closely matched to those of the security loans to avoid interest rate exposure. The ASRS receives a spread for its lending activities. Investments made with cash collateral are classified as an asset on the Statement of Plan Net Assets. A corresponding liability is recorded as the ASRS must return the cash collateral to the borrower upon expiration of the loan. As of June 30, 2008, the fair value of securities on loan was \$4.6 billion. The associated fair value of the invested collateral was \$4.8 billion, of which \$3.8 billion was invested cash collateral. Securities lending payable at June 30, 2008 was \$3.8 billion. The ASRS does not have the ability to pledge or sell the collateral unless there is a borrower default. There are no restrictions on the dollar amount of security loans that may be made by the ASRS. The ASRS is indemnified against gross negligence and borrower default by the lending agents. There were no defaults during the current fiscal year.

## Notes to the Basic Financial Statements

### 5. Derivatives

A derivative instrument is a financial instrument or other contract with all three of the following characteristics:

- a) It has (1) one or more underlyings and (2) one or more notional amounts or payment provisions or both. Those terms determine the amount of the settlement or settlements, and, in some case whether or not a settlement is required.
- b) It requires no initial net investment or an initial net investment that is smaller than would be required for other types of contracts that would be expected to have a similar response to changes in market factors.
- c) Its terms require or permit net settlement, it can readily be settled net by means outside the contract, or it provides for delivery of an asset that puts the recipient in a position not substantially different from net settlement.

Generally, derivatives are subject to both market risk and counterparty risk. The derivatives utilized by ASRS managers typically have no greater market risk than their physical counterparts, and in many cases are offset by exposure elsewhere in the portfolio. As of June 30, 2008, the ASRS had \$680 million in temporary investments held as collateral for equity and fixed income derivatives which may have a positive or negative notional value.

The ASRS believes that it is unlikely that any of the derivatives used by its managers could have a material adverse effect on the financial conditions of the ASRS.

### 6. Funding Status and Progress

Significant actuarial assumptions used in the June 30, 2007 Actuarial Valuation for the Retirement Plan and the Health Insurance Premium Benefit Plans, the most recent actuarial valuation available, include: a rate of return on investment of present and future assets of 8 percent, compounded annually, projected salary increases ranging from 4.5 percent to 9.5 percent per year, inflation rate assumption of 4.25 percent, rates of disability, rates of withdrawal, rates of retirement, mortality rates, mortality rates after disability, valuation of assets using fair value less ten-year phase-in (five-year phase-in before FY 2002) of excess (shortfall), investment income, projected unit-credit funding method. The unfunded accrued liability is amortized over a thirty-year rolling period.

Significant actuarial assumptions used in the June 30, 2007 Actuarial Valuation for the Long-Term disability Plan, the most recent actuarial valuation available, are the same as those used in the valuation of the Retirement Plan and the Health Insurance Premium Benefit Plan. The Long-Term Disability Plan valuation uses the projected unit cost method of funding. Assets are valued at market, less (or plus) an adjustment to reflect investment gains (or losses) over a 10-year period. The unfunded actuarial accrued liability is amortized over a rolling 15 years in level dollar payments.

All assumptions used in the actuarial valuations are based on five year experience studies. The ASRS Board approves all actuarial assumptions and methods.

## Notes to the Basic Financial Statements

The funded status of each plan as of the most recent actuarial valuation date is as follows (dollar amounts in millions):

Actuarial Valuation Date 30-Jun	Actuarial Value of Assets a	Actuarial Accrued Liability Projected Unit-Credit b	(Overfunded) Unfunded Actuarial Liability (b - a)	Funded Ratio (a/b)	Covered Payroll c	UAAL as a Percentage of Covered Payroll [(b-a)/c]
<b>Retirement Plan</b>						
2007	\$25,310	\$30,390	\$5,080	83.3%	\$9,162	55.4%
<b>Health Insurance Premium Benefit</b>						
2007	\$1,167	\$1,605	\$438	72.7%	\$9,162	4.8%
<b>Long Term Disability Program</b>						
2007	\$232	\$604	\$372	38.3%	\$9,162	4.1%

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment and mortality. Actuarially determined amounts are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future.

The schedules of funding progress, presented as required supplementary information following the notes to the financial statements, present multi-year trend information about whether the actuarial values of plan assets are increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

Schedules of employer contributions also presented as required supplementary information following the notes to the financial statements, present trend information about the amounts contributed to the plan by employers in comparison to the annual

required contribution (ARC). The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal cost for each year and amortize any unfunded actuarial liabilities (or funding excess) over a thirty year rolling period for the Retirement and HBS plans and over fifteen years in level dollar payments for the LTD plan.

The funding progress and the ARC have been actuarially determined in accordance with the parameters of GASB Statement 25 for the Retirement Plan and GASB Statement 43 for the Health Benefit Supplement and LTD Plans.

Projections of benefits for financial reporting purposes are based on the substantive plan and include the types of benefit costs between the employer and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

## Notes to the Basic Financial Statements

### 7. Contributions Required and Contributions Made

The A.R.S. provides statutory authority for determining the employees' and employers' contribution amounts as a percentage of covered payrolls. Employers are required to contribute at the same total rate as employees. Employees' contributions are applied towards the Retirement Plan and LTD. Employers' contributions are applied towards the Retirement Plan, Health Insurance Premium Supplement Plan and the LTD Plan. There is no legal or contractual maximum contribution rate for employees or employers. Legislation which became law as of July 1, 2005 requires annual contribution rate calculations for all fiscal years beginning after

FYE 2007. The actuarial assumptions used in this measure are those adopted by the ASRS' Board in November 2003. The contribution rates for the retirement, the health insurance premium supplement and the long term disability plans were actuarially determined using the Projected Unit Credit (PUC) funding method. Each employer and each member contribute at a rate of one-half the percent of pay needed to pay the normal cost of the Plan and to amortize the unfunded actuarial accrued liability over a rolling 30 year period for the retirement plan and the health insurance supplement plan. The long term disability plan uses a rolling 15 year period to reflect the shorter duration of LTD benefits.

The contribution rates for the years ended June 30, 2008 and 2007 were as follows:

	<b>For the contribution period ending June 30, 2008 (2006 Valuation)</b>		<b>For the contribution period ending June 30, 2007 (2004 Valuation)</b>	
	Amount	Percent of Covered Payroll	Amount	Percent of Covered Payroll
Normal cost	\$ 1,061,185,947	12.78%	\$ 924,255,945	12.34%
Amortization of (over) under-funded past service liability	363,989,961	4.37	151,909,574	2.03
<b>RETIREMENT TOTAL</b>	<b>1,425,175,908</b>	<b>17.15</b>	<b>1,076,161,519</b>	<b>14.37</b>
Normal cost	\$ 52,433,103	0.63%	\$50,199,258	0.6%
Amortization of (over) under-funded past service liability	34,510,522	0.42	32,234,177	0.47
<b>HEALTH PREMIUM BENEFIT TOTAL</b>	<b>86,943,625</b>	<b>1.05</b>	<b>85,433,435</b>	<b>1.13%</b>
Normal cost	\$ 45,907,451	0.50%	-	-
Amortization of (over) under-funded past service liability	41,150,594	0.50	-	-
<b>LONG TERM DISABILITY TOTAL</b>	<b>87,058,045</b>	<b>1.00</b>	<b>73,313,962</b>	<b>1.00%*</b>
<b>ACTUARIAL TOTAL</b>	<b>\$ 1,599,177,578</b>	<b>19.20%</b>	<b>\$ 1,234,908,916</b>	<b>16.50%</b>

Contributions made as a percentage of the current year covered payroll\*\*:

Employers' Retirement	\$ 759,171,555	8.05	\$ 663,544,344	7.55
Employees' Retirement	857,502,851	9.10	766,961,939	8.60
Employers' Health Premium Benefit	99,026,974	1.05	103,473,474	1.05
Employers' Long Term Disability	47,171,037	0.50	44,518,495	0.50
Employees' Long Term Disability	47,171,037	0.50	44,518,495	0.50
<b>Total</b>	<b>\$1,810,043,454</b>	<b>19.20</b>	<b>\$1,623,016,747</b>	<b>18.20***</b>

\* The LTD normal cost and amortization of (over) underfunded past service liability portions of the total required LTD 2007 contributions were not available for FY 2007.

\*\* Does not include system contributions.

\*\*\* The actuarial calculations establish a total benefit cost of 16.5 percent for 2007. Legislative action set the contribution rate for 2007 at 18.2 percent.

## Notes to the Basic Financial Statements

The 2004 valuation calculated a rate of 7.75 percent to become effective July 1, 2005 through June 30, 2007. The Legislature adopted a stair-step approach to increasing contribution rates, and set the rate at 9.1 percent for fiscal year 2007. (Employees paid 8.6 percent for retirement and .50 percent for long-term disability. Employers paid 7.55 percent for Retirement, 1.05 percent for the health Insurance premium supplement and .50 percent for long-term disability.) The statutory contribution rate and the actuarially determined contribution rate for the year ended June 30, 2008 was 9.6 percent for both the employees' and employers' portion. (Employees paid 9.1 percent retirement and .50 percent long-term disability. Employers paid 8.05 percent for retirement, 1.05 percent for the health insurance premium supplement and .50 percent for long-term disability). This rate was determined by the 2006 actuarial valuation. It is applied to the covered payroll to determine the employee and employer contributions. GASB Statement No. 25 defines covered payroll as all elements included in compensation paid to active employees on which contributions to a pension plan are based.

### 8. Additional Benefits

In addition to the pension benefits described, the ASRS offers the Retiree Group Insurance Program and the Health Insurance Premium Benefit Program to eligible retired and disabled members. A retired member is defined as a member actively receiving an annuity benefit and a disabled member is defined as a member receiving a Long-Term Dis-

ability (LTD) benefit through the LTD program administered by the ASRS. The employees and member employers each contributed .50 percent of compensation in FY 2008 and .50 in FY 2007 to the LTD fund.

Pursuant to A.R.S. 38-782, the Retiree Group Insurance Program makes available group health insurance coverage to eligible retired and disabled members and their dependents. Retired and disabled members of the ASRS, University Optional Retirement Plans, the Public Safety Personnel Retirement System, the Elected Officials' Retirement Plan, and the Corrections Officer Retirement Plan are eligible for health insurance benefits through the ASRS. As of June 30, 2008, more than 55,908 coverage agreements currently exist for retired and disabled members and their dependents.

Pursuant to A.R.S. 38-783, retired and disabled members with at least five years of credited service are eligible to participate in the Health Insurance Premium Benefit Program. This assistance is provided to those members who elect group coverage through either the Retiree Group Insurance Program or their former member employer.

In FY 2008 the employer's retirement contribution of 9.1 percent of compensation included 1.05 percent for the Health Premium Insurance Supplement.

The following chart illustrates the maximum amount of the monthly available benefit for eligible members and their dependents:

## Notes to the Basic Financial Statements

Years of Credited Service	Percent of Premium Benefit	Without Medicare		With Medicare A & B		Combinations	
		Retiree Only	Retiree & Dependents	Retiree Only	Retiree & Dependents	Retiree & Dependent, One with Medicare, the other without	Retiree & Dependent with Medicare, other dependent without
5.0-5.9	50 percent	\$75	\$130	\$50	\$85	\$107.50	\$107.50
6.0-6.9	60 percent	90	156	60	102	129.00	129.00
7.0-7.9	70 percent	105	182	70	119	150.50	150.50
8.0-8.9	80 percent	120	208	80	136	172.00	172.00
9.0-9.9	90 percent	135	234	90	153	193.50	193.50
10.0+	100 percent	150	260	100	170	215.00	215.00

Members who retire after December 31, 2003, can elect to receive a reduced premium benefit so that an eligible contingent annuitant may continue to receive a premium benefit after the member's death.

For qualified retirees who are participating in a medical program provided by the ASRS or an ASRS employer and who live in areas of Arizona

where no managed care (HMO) program is offered, the 2007 Arizona Legislature passed, and the Governor signed, legislation to provide an additional temporary premium benefit effective July 1, 2007 through June 30, 2009. This benefit is not available for retirees who are not Medicare eligible.

These additional increases are listed in the table below:

Years of Credited Service	With Medicare A & B		Combinations
	Retiree Only	Retiree & Dependents	Medicare Eligible Retiree with at least one Non-Medicare Dependent
5.0-5.9	\$85	\$175	\$235
6.0-6.9	102	210	282
7.0-7.9	119	245	329
8.0-8.9	136	280	376
9.0-9.9	153	315	423
10.0+	170	350	470

## Notes to the Basic Financial Statements

The ASRS reimbursed approximately \$85.1 million and \$83.2 million towards the cost of group health insurance coverage for the years ended June 30, 2008 and 2007, respectively.

### 9. Contingent Liabilities

The ASRS is also a party in various litigation matters. While the final outcome cannot be determined at this time, management is of the opinion that the final obligation, if any, for these legal actions will not have a material adverse effect on the ASRS' financial position or results of operations.

### 10. Commitments

In connection with the purchase of various partnership interests in the real estate, private equity and opportunistic investment portfolios, the ASRS has remaining unfunded commitments of approximately \$799.6 million, \$428.2 million and \$75.0 million, respectively, as of June 30, 2008.

### 11. Transfers To and From Other Funds

Due to/from other funds includes amounts that need to be transferred after the year end contribution reconciliation.

### 12. Required Supplementary Schedules

Historical trend information designed to provide information about the ASRS' progress in accumulating sufficient assets to pay benefits when due is required supplementary information. Required supplementary information prepared in accordance with the parameters of GASB Statement No. 25 and GASB Statement No. 43 is included immediately following the notes to the financial statements.

### 13. ASRS Employer Retirement Plans

All eligible retirement system employees are covered by the Arizona State Retirement Plan. The Plan is a cost-sharing, multiple-employer, defined benefit pension plan established by the State of Arizona to provide pension benefits for employees of the State and employees of participating political subdivisions and school districts. The ASRS is administered in accordance with Title 38, Chapter 5 of the Arizona Revised Statutes (A.R.S.).

The ASRS Retirement Plan provides retirement and disability benefits, annual cost of living adjustments and survivor benefits to members and their beneficiaries. A.R.S. 38-783 and A.R.S. 38-797 require separate accounts be established for health insurance premium benefits and long-term disability (LTD) benefits, respectively.

Effective July 1, 1995, the ASRS has established an account for each benefit program and has reported those funds in the combined financial statements. The financial statements of the ASRS include the financial activities of all the above funds. The ASRS Retirement Board, appointed by the governor and confirmed by the Arizona State Senate, manages the ASRS.

The contribution rate is established and may be amended by the Board of Trustees. The contribution rates for the retirement, the health insurance premium supplement and the long term disability plans are actuarially determined using the projected Unit Credit (PUC) funding method. There is no legal or contractual maximum contribution rate for employees or employers. The statutory contribution rate for the years ended June 30, 2008 was 9.6 percent (9.1 percent retirement and .5 percent LTD) and 2007 was 9.1 (8.6 percent retirement and .5 percent LTD). All eligible employees were required to contribute 9.6 percent of their annual covered salary, and the ASRS, as the employer, was required to match these contributions.

## Notes to the Basic Financial Statements

The ASRS, as the employer, made contributions for the past three years as follows:

FISCAL YEAR	SALARY BASE	RETIREMENT CONTRIBUTIONS	HBS CONTRIBUTIONS	LTD CONTRIBUTIONS	TOTAL CONTRIBUTIONS	% OF REQUIRED CONTRIBUTIONS
2008	\$10,786,746	\$878,432	\$103,056	\$54,039	\$1,035,527	100%
2007	10,549,141	873,146	117,773	51,488	1,042,407	100%
2006	10,917,002	629,911	123,362	54,585	807,858	100%

The contributions were equal to the required contributions. ASRS collects the contributions and remits them to the Plan. Employee contributions are excluded from gross income for federal and state income tax purposes, and earn interest at the rate of 8 percent per annum. After June 30, 2005 contributions made to the Plan, plus accrued interest of 4 percent per annum, are refundable upon termination of employment.

The Plan provides benefits under formulas and provisions described in the law. Benefits and administrative expenses are paid from funds contributed by members and employers and from earnings on the invested funds. The Plan provides for retirement, disability, health insurance premium benefits, and survivor benefits.

Retirement benefits are calculated on the basis of age, average monthly compensation, and service credit, which is established on a fiscal year basis (July 1 to June 30). The benefit is based on a percentage of average monthly compensation multiplied by the years of service credit.

Eligible retirement system employees are eligible for a LTD benefit in the event they become unable to perform their work. The Retiree Group Insurance Program offers health insurance coverage for both retired and disabled members.

Refer to Note 6 of these financial statements for current information regarding the funding status

and progress of the retirement, health insurance premium benefit plan and the long term disability plans.

### 14. Subsequent Event

Subsequent to June 30, 2008 world markets have continued to experience significant losses due to worldwide capital market and economic uncertainty. As a result, ASRS investments have declined by approximately 26% subsequent to June 30, 2008 through November 18, 2008, the date of the Independent Auditor's Report. A sustained loss of that magnitude will have the affect of reducing the July 1, 2009 actuarially determined funded status of the ASRS and significantly reducing the market value funded status of the ASRS for the same period. The overall result will have the effect of increasing contribution rates effective July 1, 2010.

Subsequent to June 30, 2008 the ASRS received a Notice of Claim regarding the manner in which the Permanent Benefit Increase (PBI) and the Enhanced Permanent Benefit (EPBI) were calculated for the fiscal year ended June 30, 2007. The claim asserts approximately \$743,000,000 was available to be distributed as PBI and EPBI. The ASRS determined that there were no funds available for PBI or EPBI. The Arizona Attorney General's Office and Buck Consultants, LLC believe there is no merit to this claim.

## Required Supplementary Information

### Schedule of Funding Progress

For Year Ended June 30, 2008  
(in Millions)

Actuarial Valuation Date 30-Jun	Actuarial Value of Assets a	Actuarial Accrued Liability Projected Unit-Credit b	(Overfunded) Unfunded Actuarial Accrued Liability (b - a)	Funded Ratio (a/b)	Covered Payroll c	(Overfunded) Unfunded Actuarial Accrued Liability as a Percentage of Covered Payroll [(b-a)/c]
<b>RETIREMENT FUND</b>						
2002	\$22,642	\$21,285	(\$1,357)	106.4	\$6,989	(19.4)%
2003	22,572	22,935	363	98.4	7,297	5.0
2004	22,659	24,506	1,847	92.5	7,486	24.7
2005	22,808	26,486	3,678	86.1	8,032	45.8
2006	23,767	28,192	4,426	84.3	8,312	53.2
2007	25,310	30,390	5,080	83.3	9,162	55.4
<b>HEALTH INSURANCE PREMIUM BENEFIT</b>						
2005	\$ 1,028	\$1,456	\$ 428	70.6	\$8,032	5.3%
2006	1,085	1,505	420	72.1	8,312	5.1
2007	1,167	1,605	438	72.7	9,162	4.8
<b>LONG TERM DISABILITY PROGRAM</b>						
2005	\$ 165	\$577	\$ 413	28.2	\$8,032	5.1%
2006	194	575	380	33.8	8,312	4.6
2007	232	604	372	38.3	9,162	4.1

### Schedule of Employer Contributions

For Year Ended June 30, 2008  
(in Thousands)

	Retirement Fund		Health Insurance Premium Benefit		Long Term Disability Program	
	Annual Required Contribution	Percentage Contributed	Annual Required Contribution	Percentage Contributed	Annual Required Contribution	Percentage Contributed
2003	\$138,100	100%	\$ 4,256	100%	\$34,800	100%
2004	297,770	100	79,662	100	36,026	100
2005	318,311	100	85,350	100	38,982	100
2006	477,472	100	93,461	100	41,188	100
2007	663,544	100	103,473	100	44,518	100
2008	759,482	100	99,027	100	47,171	100

See notes to required supplemental information.

## Notes to Required Supplementary Information

### 1. Actuarial Methods and Assumptions for Valuations Performed

The information presented in the required supplementary schedules was determined as part of the actuarial valuations at the dates indicated.

The Projected Unit Credit (PUC) method is the actuarial cost method used in the valuations for the period ended June 30, 2007. The unfunded actuarial accrued liability is amortized over a 30-year rolling period for the Retirement Fund and the Health Insurance Premium Benefit. The Long-Term Disability (LTD) Program's unfunded actuarial accrued liability is amortized over a rolling 15-year period to reflect the shorter duration of LTD benefits. The amortization method is the Level Dollar Method. The actuarial value of assets is the market value adjusted to phase in the recognition of investment gains and losses over a period of time. For years prior to fiscal 2002, the period is five years. For 2002 and later years, the period is ten years. The investment return rate assumption is 8 percent per annum, compounded annually. The inflation rate assumption is 4.25 percent per annum. Members' salaries are assumed to increase at a rate of 4.50 percent to 9.50 percent per annum, depending on the length of service. The permanent benefit increase (PBI) reserve was zero as of June 30, 2008, as a result of the payment of the 2005 PBI.

### Significant Factors Affecting Identification of Trends

#### **2000**

The age restriction on eligibility for the PBI was removed.

#### **2001**

**Return to Work.** Permits retired members of the ASRS to return to work and still be eligible to receive retirement benefits if they have been terminated from employment for a period of 12 months. The members who take this option will not be eligible for LTD benefits nor will they contribute to the ASRS or accrue additional benefits during the period of re-employment. This act is repealed June 30, 2003.

This is similar to the bill passed in 2000 allowing retired teachers to return to work, and it does not affect the requirements of that program.

**Transferring Credits.** Permits an inactive member who has not retired to transfer credited service from one state plan to their current or former retirement plan if the inactive member is not eligible for membership in the ASRS and has not withdrawn contributions from the ASRS.

## Notes to Required Supplementary Information

**Health Insurance Premium Benefit.** Increases the health insurance premium benefit for members of the eligible state retirement systems by the following amounts:

- Medicare eligible member from \$65 to \$100
- Non-Medicare eligible member from \$95 to \$150
- Non-Medicare family coverage from \$175 to \$260
- Medicare eligible family coverage from \$115 to \$170
- Combination Medicare and non-Medicare eligible from \$145 to \$215

**Rural Health Insurance Premium Benefit.** In addition to the premium benefit paid to ASRS retired and disabled members, provides for retired and disabled members who live in areas of the state not served by a managed care program (HMO) and who have 10 years of credited service in the following amounts:

- Medicare eligible member \$170 per month
- Non-Medicare eligible member \$300 per month
- Non-Medicare family coverage \$600 per month
- Medicare eligible family coverage \$350 per month
- Combination Medicare and non-Medicare eligible \$470 per month

Also provides that a retired or disabled member may elect to purchase individual coverage and receive a payment of the increased subsidy through the member's employer if the employer assumes the administrative function associated with the payment including verification that the payment is used for health insurance.

**Supplemental Defined Contribution (DC) Plans.** Repeals the provisions for the alternate DC retirement programs established in 1998 for exempt state employees (non-merit service employees), legislative agency employees and certain term limited elected officials. Persons already participating in those programs are grandfathered into them.

Provides that the ASRS, the Public Safety Personnel Retirement System (PSPRS) and their employers may establish a 401(a) defined contribution supplementary program. Employers may elect to match contributions to the supplementary program on an annual basis. Employer and member contributions to the supplement are vested immediately with the member.

**Modified Deferred Retirement Option Plan (DROP) Program.** Permits an employer to offer a member who has reached normal retirement (80 points, age 62 with 10 years, or age 65) a contract to work up to an additional three years. Retirement contributions are not made to ASRS during the contract period; however LTD contributions still continue to be paid to the ASRS. During the contract period, the member and employer contribute to a supplemental DC Plan at a rate negotiated between the member and the employer. Upon completing the additional service, the employee must purchase an equivalent amount of service from the ASRS in order to receive credit for the three years worked.

**Partial Lump Sum Option.** Beginning July 1, 2002, a member may elect a partial lump sum payment at retirement equal to not more than 36 months of the member's calculated retirement benefit. The life annuity amount then would be adjusted actuarially to a reduced amount to offset the lump sum payment.

## Notes to Required Supplementary Information

**Graded Multiplier.** Provides a variable multiplier in the retirement benefit formula, increasing with years of service according to the following:

- 0.00 to 19.99 Years of Service      2.10 %
- 20.00 to 24.99 Years of Service      2.15 %
- 25.00 to 29.99 Years of Service      2.20 %
- 30.00 or More Years of Service      2.30 %

**Supplemental Defined Contribution (DC) Retirement Plan.** Permits the four state retirement plans to establish a 401(a) defined contribution program as a supplement to the state defined benefit programs. Repeals the alternative DC programs for term-limited state elected officials and state employees exempted from state personnel rules. Employees may make contributions to IRS limits with a match by the employer. Each employer member of the ASRS would be permitted to choose its own match rate.

**Permanent Benefit Increase (PBI) Enhancement.** Provides that interest at a rate of 8 percent be paid on the funds held in reserve for the PBI. The interest accrued to the reserve is used to fund an enhanced PBI based on the number of years a member has been retired. A member who has at least 10 years of service would be eligible for an incremental increase for each five years of retirement.

**PSPRS membership; park rangers.** Transfers state and county park rangers from the ASRS to the PSPRS.

**Community colleges; optional retirement; contributions.** Permits a community college that has an optional retirement program to increase employer and employee contributions to seven percent. It provides a window for ASRS members to transfer to the optional programs from October 1, 2001 through December 31, 2001. The ASRS shall transfer their contributions plus interest to the optional program.

**Removal of requirement that purchase of military service be only for which the member is not receiving a benefit.** Allows for ASRS members to purchase military service time for which they may already be receiving benefits.

**Pop-Up for members choosing a life certain option.** Allows for retirees who choose the 5, 10, or 15 period certain options to rescind the election and thereafter, receive a straight life annuity, including postretirement increases. The member may again elect a period certain and life annuity subject to the same provision previously elected by the member.

### **2002**

No material changes.

### **2003**

**Change to Phase-in Period.** Prior to the 2002 valuation, actuarial assets were equal to market, less a five-year phase-in of the excess of expected investment return over actual investment return. For 2002 and future years, the Board changed the five-year phase-in period to a ten-year period. So, the 2002 valuation recognizes only 10 percent of the 2002 investment loss. The years prior to 2002 remain on their original five-year schedules.

**Extension of the Rural Health Insurance Premium Benefit.** The Arizona Legislature passed legislation that extends the Rural Health Insurance Subsidy for a period of two additional years.

### **2004**

**Service Purchase Program.** The Arizona Legislature revised the method of calculating the cost of service purchases, so that future purchases would be made at true actuarial present value. ASRS began to charge interest at 8% per annum for service purchases under payroll deduction agreements.

## Notes to Required Supplementary Information

**Early Retirement Incentive Programs.** The Arizona Legislature provided that employers that participate in ASRS and offer early retirement incentives to their employees must notify ASRS of the incentives. ASRS will determine the liability associated with the cost of the incentives and the employers will pay the cost.

**Long-Term Disability Program.** The Arizona Legislature revised and clarified LTD provisions so that disabled members will be required, when appropriate, to participate in rehabilitation programs and to pursue obtaining Social Security disability benefits. In addition, the legislation limited the receipt of disability benefits on the basis of a member's "own occupation" to 24 months, rather than to 24 consecutive months.

### **2005**

**Refund of Contributions.** The Board reduced the rate of interest accruals on forfeited balances from 8 percent to 4 percent effective July 1, 2005.

#### **The Arizona Legislature:**

- Changed contribution rate calculations from biennial to annual for all fiscal years beginning after FYE 2007. It also modified biennial rate requirements to allow the rate to be stepped in over a two year period for FYE 2006 and 2007.
- The legislature pegged the contribution rates for fiscal year 2006 and fiscal year 2007 at 6.90 percent and 8.60 percent respectively. After fiscal year 2007, contribution rates are to be determined annually.
- Eliminated the rural health insurance premium benefit for retirees in the Arizona retirement system who are not eligible for Medicare.

**Temporary Rural Health Insurance Premium Benefit.** The Legislature extended the temporary Rural Health Insurance Subsidy for a two year period, from July 1, 2005, to June 30, 2007. The benefit is provided to Medicare-eligible retirees and disabled members who live in Arizona counties with no Health Maintenance Organization (HMO) service area and who have at least 10 years of credited service.

### **2006**

The Legislature limited the ability of ASRS retirees to rescind their elections after retirement. Specifically, members who have chosen a form with a death benefit can "pop up" once to the single life form, but are then not allowed to "pop down" to a death benefit form. Implementation of this change is pending the receipt of a Private Letter Ruling from the Internal Revenue Service.

### **2007 (most recent actuarial evaluation)**

#### **The Legislature:**

- Changed the Long-Term Disability program social security disability offsets and pre-existing condition requirements. The social security disability offsets were changed from 64 percent to 85 percent and the social security retirement benefits were changed from 83 percent to 85 percent. The pre-existing condition requirement was changed from three months to six months.
- Extended the temporary Rural Health Insurance Subsidy for two year.
- Made post-doctoral scholars exempt from ASRS membership.
- Expanded eligibility for Active Military Service Credit.

## Additional Supplementary Information

### Combining Schedule of Retirement Net Assets

For the Year Ended June 30, 2008

(Dollars in Thousands)

	Retirement Plan	Retirement System	Combined 2008
<b>ASSETS:</b>			
Cash	\$23,304	\$ -	\$23,304
<b>RECEIVABLES:</b>			
Accrued interest & dividends	68,635	1,454	70,089
Securities sold	405,404	8,587	413,991
Forward contracts	1,500,630	31,786	1,532,416
Contributions	49,765	191	49,956
Other	5,884	82	5,966
Total receivables	2,030,318	42,100	2,072,418
<b>INVESTMENTS AT FAIR VALUE :</b>			
Temporary investments	1,541,459	33,530	1,574,989
Temporary investments from securities lending collateral	3,559,268	75,392	3,634,660
U. S. government obligations	4,059,482	117,480	4,176,962
Corporate bonds	2,287,903	51,261	2,339,164
Common and preferred stocks	16,293,483	312,620	16,606,103
Real estate	481,628	10,804	492,432
Private equity	123,817	-	123,817
Opportunistic investments	71,632	1,607	73,239
Total investments	28,418,672	602,694	29,021,366
<b>TOTAL ASSETS</b>	<b>30,472,294</b>	<b>644,794</b>	<b>31,117,088</b>
<b>LIABILITIES:</b>			
Payable for securities purchased	1,168,304	24,747	1,193,051
Payable for securities lending collateral	3,559,268	75,392	3,634,660
Forward contracts payable	1,508,800	31,959	1,540,759
Other	27,798	3,633	31,431
Total liabilities	6,264,170	135,731	6,399,901
<b>NET ASSETS HELD IN TRUST FOR PENSION BENEFITS</b>	<b>\$24,208,124</b>	<b>\$509,063</b>	<b>\$24,717,187</b>

In accordance with GASB 25, for financial reporting purposes the Retirement Plan and The Retirement System are presented in one column, Retirement Fund, in the ASRS basic financial statements because they are administered within a single pension plan. The Combining Schedule of Retirement Net Assets and Changes in Retirement Net Assets are presented here to provide members with more detailed information about the two plan components.

## Additional Supplementary Information

### Combining Schedule of Changes in Retirement Net Assets

For the Year Ended June 30, 2008

(Dollars in Thousands)

	Retirement Plan	Retirement System	Combined 2008
<b>ADDITIONS (REDUCTIONS)</b>			
Contributions			
Member contributions	\$857,503	\$310	\$857,813
Employer contributions	759,172	310	759,482
Transfers from other plans	5,196	-	5,196
Member reimbursements	90,030	-	90,030
<b>Total Contributions</b>	<b>1,711,901</b>	<b>620</b>	<b>1,712,521</b>
Income (Loss) from investment activities			
Net appreciation (depreciation) in fair value	(2,466,567)	(44,968)	(2,511,535)
Interest	249,801	4,552	254,353
Dividends	307,756	5,611	313,367
Real estate	22,361	408	22,769
Private equity	2,849	-	2,849
Other	10,960	110	11,070
<b>Total income (loss) from investment activities</b>	<b>(1,872,840)</b>	<b>(34,287)</b>	<b>(1,907,127)</b>
Less investment activity expenses			
Management fees and monitoring services (publically traded)	47,349	863	48,212
Real estate expense	22,296	406	22,702
Private equity expense	7,022	-	7,022
<b>Total investment activity expenses</b>	<b>76,667</b>	<b>1,269</b>	<b>77,936</b>
<b>Net income (loss) from investment activities</b>	<b>(1,949,507)</b>	<b>(35,556)</b>	<b>(1,985,063)</b>
From securities lending activities			
Security loan program	149,480	2,725	152,205
Security loan interest expense	128,066	2,335	130,401
<b>Net income from securities lending activities</b>	<b>21,414</b>	<b>390</b>	<b>21,804</b>
<b>Total net investment income (loss)</b>	<b>(1,928,093)</b>	<b>(35,166)</b>	<b>(1,963,259)</b>
<b>TOTAL ADDITIONS (REDUCTIONS)</b>	<b>(216,192)</b>	<b>(34,546)</b>	<b>(250,738)</b>
<b>DEDUCTIONS</b>			
Retirement and disability benefits	1,721,062	47,157	1,768,219
Survivor benefits	20,847	1,801	22,648
Refunds to withdrawing members, including interest	104,080	307	104,387
Administrative expenses	28,589	606	29,195
Transfers to other plans	177,176	-	177,176
Other	-	8	8
<b>TOTAL DEDUCTIONS</b>	<b>2,051,754</b>	<b>49,879</b>	<b>2,101,633</b>
<b>NET INCREASE (DECREASE)</b>	<b>(2,267,946)</b>	<b>(84,425)</b>	<b>(2,352,371)</b>
Net assets held in trust for pension benefits:			
Beginning of year	26,476,070	593,488	27,069,558
End of year	\$24,208,124	\$509,063	\$24,717,187

In accordance with GASB 25, for financial reporting purposes the Retirement Plan and The Retirement System are presented in one column, Retirement Fund, in the ASRS basic financial statements because they are administered within a single pension plan. The Combining Schedule of Retirement Net Assets and Changes in Retirement Net Assets are presented here to provide members with more detailed information about the two plan components.

## Additional Supplementary Information

### Schedule of Additions by Source

(Dollars in Thousands)

Year	Member Contribution Made	Employer Contribution Made	Net Investment Income	Member Reimbursements and Other	Total
1999	\$179,087	\$179,087	\$2,848,321	\$46,171	\$3,252,666
2000	152,957	152,958	2,035,312	35,348	2,376,575
2001	163,442	163,442	(1,528,691)	37,687	(1,164,120)
2002	168,213	168,213	(1,768,077)	51,350	(1,380,301)
2003	177,157	177,157	368,631	93,552	816,497
2004	413,462	413,458	3,228,785	113,944	4,169,649
2005	442,643	442,643	1,803,392	141,932	2,830,610
2006	612,121	612,121	2,230,939	125,751	3,580,932
2007	811,480	811,535	4,310,518	107,548	6,041,081
2008	904,984	905,680	(2,072,441)	95,226	(166,551)

### Schedule of Deductions by Type

(Dollars in Thousands)

Year	Benefits	Refunds	Administration, Transfers and Other	Total
1999	\$713,871	\$26,108	\$15,353	\$755,332
2000	787,553	70,754	19,744	878,051
2001	909,615	98,535	24,640	1,032,790
2002	1,069,044	42,765	28,105	1,139,914
2003	1,222,564	35,976	37,877	1,296,417
2004	1,396,481	36,212	35,745	1,468,438
2005	1,576,734	44,164	33,426	1,654,324
2006	1,703,215	60,313	39,395	1,802,923
2007	1,824,865	77,910	47,703	1,950,478
2008	1,944,283	104,387	210,432	2,259,102

## Additional Supplementary Information

### Schedule of Administrative Expenses

For Year Ended June 30, 2008

(Dollars in Thousands)

	Retirement and Health Benefit Supplement	Long-Term Disability	Combined 2008
<b>PERSONNEL SERVICES</b>			
Salaries	\$11,280	\$-	\$11,280
Retirement Contributions	981	-	981
Other Employee Related Expenses	3,172	-	3,172
<b>Total Personnel Services</b>	<b>15,433</b>	<b>-</b>	<b>15,433</b>
<b>PROFESSIONAL SERVICES</b>			
Actuary & Benefit Consulting	1,112	-	1,112
Audit, Consulting & Legal Fees	795	-	795
Programming Costs	3,814	-	3,814
Other Outside Services	3,649	2,750	6,399
<b>Total Professional Services</b>	<b>9,370</b>	<b>2,750</b>	<b>12,120</b>
<b>COMMUNICATIONS</b>			
Postage	754	-	754
Printing	140	-	140
Telephone	406	-	406
Advertising	16	-	16
<b>Total Communications</b>	<b>1,316</b>	<b>-</b>	<b>1,316</b>
<b>MISCELLANEOUS</b>			
Office Rent	1,561	-	1,561
Furniture & Equipment	699	-	699
Software & Support	1,178	-	1,178
Repair & Maintenance	112	-	112
Travel	120	-	120
Operating Supplies	91	-	91
Insurance	131	-	131
Dues & Subscriptions	375	-	375
Education & Training	87	-	87
Miscellaneous	4	-	4
<b>Total Miscellaneous</b>	<b>4,358</b>	<b>-</b>	<b>4,358</b>
<b>TOTAL</b>	<b>\$30,477</b>	<b>\$2,750</b>	<b>\$33,227</b>

## Additional Supplementary Information

### Schedule of Professional Consultant Fees

For Year Ended June 30, 2008

(Dollars in Thousands)

Professional/Consultant	Nature Of Service	Expenses
SEDGWICK CLAIMS MANAGMENT SERVICES	LTD ADMINISTRATIVE SERVICES	\$2,750
COMSYS INFORMATION TECHNOLOGY SERVICES, INC	IT CONSULTING SERVICES	1,648
MELLON BANK TRUST & INVESTMENTS	PENSION/CUSTODIAL BANK SERVICES	1,138
BUCK CONSULTANTS LLC	ACTUARIAL SERVICES	1,112
H L YOH CO, LLC	IT CONSULTING SERVICES	1,049
ENNIS, KNUPP & ASSOCIATES, INC.	INVESTMENT CONSULTING SERVICES	481
THE TOWNSEND GROUP	INVESTMENT CONSULTING SERVICES	375
ARIZONA ATTORNEY GENERAL OFFICE	LEGAL SERVICES	305
MERCER HUMAN RESOURCE CONSULTING	INVESTMENT CONSULTING SERVICES	289
MEKETA INVESTMENT GROUP	INVESTMENT CONSULTING SERVICES	275
REMEDY TEMPS, INC	IT CONSULTING SERVICES	263
INT TECHNOLOGIES LLC	IT CONSULTING SERVICES	228
GLOTEL INC	IT CONSULTING SERVICES	220
PROVINCIA STAFFING LLC	IT CONSULTING SERVICES/TEMPORARY AGENCY	210
AVAYA INC	IT CONSULTING SERVICES	203
COX CASTLE AND NICHOLSON	INVESTMENT LEGAL SERVICES	203
SPHERION CORPORATION	IT CONSULTING SERVICES	182
DRC FINANCIAL SERVICES, PLLC	ACCOUNTING CONSULTING SERVICES	134
FRANKLIN PARK ASSOCIATES, LLC	INVESTMENT CONSULTING SERVICES	125
KELLY SERVICES INC	TEMPORARY AGENCY	91
TECH KNOWLEDGY STORE LLC	IT CONSULTING SERVICES	88
DATAMAVENTS, INC	IT CONSULTING SERVICES	75
HEINFELD MEECH AND CO PC	AUDIT SERVICES	72
SKADDEN ARPS SLATE MEAGHER AND FLOM LLP	INVESTMENT LEGAL SERVICES	70
STRAIGHT LINE PARTNERS, LLC	IT CONSULTING SERVICES	68
INSTITUTIONAL SHAREHOLDER SERVICES INC	INVESTMENT CONSULTING SERVICES	58
TECH KNOWLEDGY STORE LLC	IT CONSULTING SERVICES	50
MORRISON AND FOERSTER LLP	INVESTMENT LEGAL SERVICES	45
FOSTER PEPPER AND SHEFELMAN PLLC	INVESTMENT LEGAL SERVICES	44
MUNIS INC	IT CONSULTING SERVICES	43
CHARLES W WHETSTINE	LEGAL SERVICES	40
CEM BENCHMARKING INC	PLAN ADMINISTRATION CONSULTING	35
PROVALIANT INC	IT CONSULTING SERVICES	33
COMPUTER INFORMATION TECHNOLOGY CORP	IT CONSULTING SERVICES	22
LEWIS AND ROCA	INVESTMENT LEGAL SERVICES	20
SERVIONT GLOBAL SOLUTIONS INC	IT CONSULTING SERVICES	18
TRANSUNION LLC	CONSULTING SERVICES	18
BEHAVIOR RESEARCH CENTER	CONSULTING SERVICES	16
OTHER CONSULTING FEES (less than fifteen thousand dollars)		24
	<b>TOTAL</b>	<b><u>\$12,120</u></b>

## Additional Supplementary Information

### Schedule of Total Investment Income by Manager

For Year Ended June 30, 2008

(Dollars in Thousands)

Manager	Market Appreciation (Depreciation)	Interest	Dividends	Real Estate	Private Equity Revenue	Other	Total Investment Income
ASRS INTERNAL	(\$1,050,771)	\$136,363	\$127,296	\$7,403	-	\$3,380	(\$776,329)
J.P. MORGAN FIXED	(9,677)	33,694	-	-	-	(168)	23,849
BLACKROCK	11,042	55,824	-	-	-	73	66,939
BRANDYWINE EQ	81	-	-	-	-	-	81
DIMENSIONAL FD EQFD	(148,679)	161	7,170	-	-	10	(141,338)
ASRS TRANSITION ACCT	-	-	-	-	-	-	-
BGI-DOM CORE EQUITY	(198,347)	-	-	-	-	-	(198,347)
BGI US DEBT FD	94,976	-	-	-	-	-	94,976
CAP GUARDIAN INTL EQ	-	-	-	-	-	-	-
BANK OF NEW YORK	-	-	63	-	-	-	63
BGI - EAFE	-	-	-	-	-	-	-
BRANDES INTL EQUITY	(334,530)	1,971	65,585	-	-	7,850	(259,124)
SSGA-S&P MID CAP FD	(4,206)	-	496	-	-	-	(3,710)
COLUMBIA SMALL CAP	62	-	-	-	-	-	62
CLEAR CHANNEL PRV ST	(446)	1,000	70	-	-	-	(375)
FORSTMANN-LEFF ASSOC	5	-	-	-	-	-	5
WELLINGTON MGMT CO	(8,131)	571	2,967	-	-	-	(4,593)
LSV ASSET MANAGEMENT	(175,958)	214	16,627	-	-	-	(159,117)
SSGA - LARGE CAP	(61,233)	133	4,657	-	-	-	(56,443)
FRANKLIN LARGE CAP	(73,245)	70	7,294	-	-	-	(65,881)
INTECH LARGE CAP	(37,594)	243	9,241	-	-	-	(28,110)
CRM MID CAP VALUE	(16,213)	298	2,111	-	-	-	(13,804)
BRIDGEWATER GLBL TAA	(118,738)	9,245	15,594	-	-	-	(93,899)
PYRAMIS GLOBAL	1,278	23,824	2	-	-	-	25,104
GTAA BGI EQ INDEX FD	(49,249)	-	-	-	-	-	(49,249)
GTAA TR BGI LEH INX	21,557	-	-	-	-	-	21,557
GTAA TR BGI EAFE INX	(10,471)	-	-	-	-	-	(10,471)
ASRS TIMESSQUARE	(8,923)	1,212	2,818	-	-	-	(4,893)
ASRS - BATTERYMARCH	2	-	-	-	-	-	2
MFS INTL LC	(87,806)	445	24,639	-	-	-	(62,722)
HANSBERGER GL INV LC	(60,463)	207	14,812	-	-	663	(44,781)
DFA INTL SC	(37,490)	32	5,745	-	-	224	(31,489)
AXA ROSENBERG SC	(63,077)	77	8,702	-	-	72	(54,226)
NORTHPOINTE	(22,407)	242	591	-	-	-	(21,574)
ING LONG ONLY	(2,066)	6	156	-	-	-	(1,904)
URDANG	(3,044)	16	228	-	-	-	(2,800)
BGI GLOBAL EXUS	(58,676)	-	-	-	-	-	(58,676)
ING LONG/SHORT	131	34	-	-	-	-	165
CLASS ACTION	1,131	-	-	-	-	-	1,131
JACOB LEVY	(38,413)	(214)	3,732	-	-	-	(34,895)
LA SALLE	(17,894)	23	2,569	-	-	34	(15,268)
EUROPEAN INVEST	(17,734)	186	1,620	-	-	32	(15,896)
BLACKROCK MORTGAGE	595	-	14	-	-	-	609

## Additional Supplementary Information

### Schedule of Total Investment Income by Manager

For Year Ended June 30, 2008

(Dollars in Thousands)

Manager	Market Appreciation (Depreciation)	Interest	Dividends	Real Estate	Private Equity Revenue	Other	Total Investment Income
JPM BOND FUND	(148)	-	-	-	-	-	(148)
CHAMPLAIN	(4,106)	93	517	-	-	-	(3,496)
COPPER ROCK	(16,125)	50	92	-	-	-	(15,983)
IRONBRIDGE	(6,323)	89	902	-	-	-	(5,332)
DEAM S&P 500	(27,655)	17	557	-	-	-	(27,081)
DEAM OVERLAY	2,752	59	-	-	-	-	2,811
DEAM LEHMAN AGG	(2,184)	627	-	-	-	-	(1,557)
DEAM EAFW	(7,490)	1	487	-	-	-	(7,002)
HINES US CORE"	-	-	-	9	-	-	9
TISHMAN VI FUND	-	-	-	382	-	-	382
ROTHSCHILD	-	-	-	5,558	-	-	5,558
RREEF GL OPP II	-	-	-	1,635	-	-	1,635
CIM URBAN REIT	-	-	-	3,470	-	-	3,470
PLA RETAIL FDI	-	-	-	2,502	-	-	2,502
WESTBK R/E VII	-	-	-	(626)	-	-	(626)
DUNE CAP MGMT	-	-	-	(245)	-	-	(245)
AEW VIF II, LP	-	-	-	301	-	-	301
THE CARLYLE GROUP	-	-	-	3,466	-	-	3,466
COLONY	-	-	-	(3,707)	-	-	(3,707)
HEITMAN	-	-	-	926	-	-	926
PRISA II	-	-	-	846	-	-	846
BREP VI (Blackstone)	-	-	-	4,142	-	-	4,142
TISHMAN VII LP	-	-	-	(497)	-	-	(497)
CIM FUND III LP	-	-	-	(305)	-	-	(305)
AIG ASIAN FUND	-	-	-	(82)	-	-	(82)
FIVE MILE CAP II	-	-	-	(1,392)	-	-	(1,392)
PLA RESIDENTIAL II	-	-	-	(1)	-	-	(1)
TH LEE VI	-	-	-	-	4,871	-	4,871
SILVER LAKES	-	-	-	-	9	-	9
CEP OP FUND II	-	-	-	-	158	-	158
CMEA VENTURE	-	-	-	-	1	-	1
MONTREUX PRT IV	-	-	-	-	(290)	-	(290)
RESOLUTE FUND III	-	-	-	-	(340)	-	(340)
PAUL CAPITAL	-	-	-	-	(520)	-	(520)
WARBURG PINCUS X	-	-	-	-	(805)	-	(805)
PLATINUM	-	-	-	-	23	-	23
NEW MOUNTAIN III	-	-	-	-	37	-	37
WAYZATA OPP II	-	-	-	-	(106)	-	(106)
PENINSULA II	-	-	-	-	(95)	-	(95)
PINE BROOK II	-	-	-	-	35	-	35
<b>TOTAL</b>	<b>(\$2,645,900)</b>	<b>\$265,814</b>	<b>\$327,354</b>	<b>\$23,785</b>	<b>\$2,978</b>	<b>\$12,170</b>	<b>(\$2,013,799)</b>

## Additional Supplementary Information

### Schedule of Total Investment Expenses

For the Year Ended June 30, 2008

(Dollars in Thousands)

	Management Fees Public	Management Fees Real Estate	Other Expenses Real Estate	Management Fees Private Equity	Other Expenses Private Equity	TOTAL
AEW VIF II, LP	\$-	\$219	\$20	\$-	\$-	\$239
AIG ASIAN FUND	-	324	59	-	-	383
ASRS INTERNAL	-	6,656	-	-	-	6,656
AXA ROSENBERG	2,220	-	-	-	-	2,220
BARCLAYS GLOBAL INVESTORS	4,358	-	-	-	-	4,358
BLACKROCK FINANCIAL	1,595	-	-	-	-	1,595
BRANDES INVESTMENTS	6,614	-	-	-	-	6,614
BREP VI (Blackstone)	-	1,403	253	-	-	1,656
BRIDGEWATER ASSET	9,329	-	-	-	-	9,329
CEB OP FUND	-	-	-	215	208	423
CHAMPLAIN INVESTMENT	498	-	-	-	-	498
CIM FUND III LP	-	1,229	67	-	-	1,296
CIM URBAN REIT	-	254	981	-	-	1,235
CMEA VENTURE	-	-	-	148	204	352
COLONY	-	586	570	-	-	1,156
COPPER ROCK CAPITAL	353	-	-	-	-	353
CRAMER ROSENTHA	703	-	-	-	-	703
DEUTSCHE INVESTMENT MANAGEMENT	250	-	-	-	-	250
DIMENSIONAL FUND ADVISORS	2,256	-	-	-	-	2,256
DUNE CAP MGMT	-	463	(54)	-	-	409
EUROPEAN INVESTMENT	320	-	-	-	-	320
FIVE MILE CAP II	-	816	225	-	-	1,041
FRANKLIN PORTFOLIO	746	-	-	-	-	746
HANSBEGER GLOBAL	2,713	-	-	-	-	2,713
HEITMAN	-	592	745	-	-	1,337
HINES CORE	-	40	-	-	-	40
IDG VENTURES	-	-	-	78	151	229
ING CLARION	29	-	-	-	-	29
INTECH	2,629	-	-	-	-	2,629
IRONBRIDGE CAPITAL	488	-	-	-	-	488
JACOBS LEVY	932	-	-	-	-	932
JP MORGAN INVESTMENT	988	-	-	-	-	988

## Additional Supplementary Information

### Schedule of Total Investment Expenses

For the Year Ended June 30, 2008  
(Dollars in Thousands)

	Management Fees Public	Management Fees Real Estate	Other Expenses Real Estate	Management Fees Private Equity	Other Expenses Private Equity	TOTAL
LASALLE INVESTMENT	391	-	-	-	-	391
LSV ASSET MANAGEMENT	1,831	-	-	-	-	1,831
MFS INSTITUTIONAL ADVISORS INC	2,975	-	-	-	-	2,975
MONTREUX PRT IV	-	-	-	55	44	99
NEW MOUNTAIN III	-	-	-	435	206	641
NORTHPOINTE CAPITAL	839	-	-	-	-	839
PAUL CAPITAL	-	-	-	-	22	22
PENINSULA II	-	-	-	187	119	306
PINE BROOK II	-	-	-	103	337	440
PLA RESIDENTIAL II	-	229	227	-	-	456
PLA RETAIL FDI	-	520	550	-	-	1,070
PLATINUM	-	-	-	335	745	1,080
PRISA II	-	136	-	-	-	136
PYRAMIS GLOBAL	969	-	-	-	-	969
RESOLUTE FUND III	-	-	-	60	376	436
ROTHSCHILD RE	-	1,163	786	-	-	1,949
RREEF GL OPP II	-	518	458	-	-	976
SILVER LAKES	-	-	-	346	84	430
STATE STREET	661	-	-	-	-	661
TH LEE VI	-	-	-	645	1,396	2,041
THE CARLYLE GROUP	-	504	548	-	-	1,052
TIMES SQUARE CAPITAL	3,623	-	-	-	-	3,623
TISHMAN VI FUND	-	116	284	-	-	400
TISHMAN VII LP	-	816	418	-	-	1,234
URDANG SECURITIES	54	-	-	-	-	54
WARBURG PINCUS X	-	-	-	320	137	457
WAYZATA OPP II	-	-	-	140	245	385
WELLINGTON MANAGEMENT	1,999	-	-	-	-	1,999
WESTBK R/E VII	-	994	-	-	-	994
<b>TOTAL</b>	<b>\$50,363</b>	<b>\$17,578</b>	<b>\$6,137</b>	<b>\$3,067</b>	<b>\$4,274</b>	<b>\$81,419</b>



**Arizona State Retirement System**  
A Component Unit of the State of Arizona



**Investment  
Section**

2008



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## Table of Contents

### III. Investment Section

Investment Report .....	66
Investment Results .....	69
Performance Accounting / Computation Standards .....	69
Annualized Rates of Return .....	69
Historical Rates of Return .....	69
Monthly Returns .....	70
Net Income from Investments .....	70
Ten Year Review of Investment Income .....	71
Asset Allocation .....	72
Schedule of Investments .....	72
Equity Portfolio Profile .....	73
Equity Sub-Sector Allocation .....	73
Ten Largest Domestic Equity Holdings .....	73
Distribution by Market Sector .....	74
Ten Largest International Equity Holdings .....	74
Summary of Broker Commissions .....	74
Fixed Income Portfolio Profile .....	75
Distribution by Sector .....	75
Distribution by Coupon .....	75
Distribution by Maturity .....	75
Ten Largest Domestic Fixed Income Holdings .....	76
Real Estate Portfolio Profile .....	76
Ten Largest Real Estate Managers .....	76
Private Equity Portfolio Profile .....	77
Ten Largest Private Equity Managers .....	77
Opportunistic Portfolio Profile .....	77
Largest Opportunistic Equity Managers .....	77
Schedule of Broker Commissions - Domestic Equity Trades .....	78
Schedule of Broker Commissions - Foreign Equity Trades .....	80

## Investment Report

### U.S. Economy and Capital Markets FY 2007-08

*By Lawrence Trachtenberg, Investment Committee Chairman, and  
Gary R. Dokes, Chief Investment Officer*

#### 3rd Quarter 2007

Negative headlines included surging energy costs, a declining dollar and the sub-prime lending meltdown. However, GDP growth held up well for the quarter at 2.7%. The unemployment rate rose to 4.7% from 4.5% in the previous quarter. The CPI Index rose by 1.0% year-over-year. The Fed Funds rate was cut by 0.50% to 4.75% during the quarter to provide liquidity to help stabilize the looming credit crunch.

The domestic large cap and international equity markets were in positive territory for the quarter. The S&P 500 Index was up 2.0%, ahead of both small caps and mid caps. The S&P MidCap Index fell 0.9% during the quarter and the S&P SmallCap Index declined 1.8%. Growth considerably outperformed value across the cap spectrums. International equity markets were in positive territory. The MSCI EAFE Index appreciated 2.2% in U.S. dollar terms for the quarter. The MSCI ACWI ex U.S. Index rose by 4.7% for the quarter. Hong Kong and Finland led developed markets in U.S. dollar returns. Emerging markets significantly outperformed their developed market counterparts. The MSCI EM Index appreciated 14.5% in U.S. dollar terms.

The Lehman Brothers Aggregate Index performed better than domestic equity markets and advanced 2.8% during the quarter. Longer-term issues outperformed short-term issues. Higher-quality issues outperformed lower-quality issues in the investment credit space. Mortgages returned 2.6% while Treasuries advanced 3.8%.

REITs exhibited positive performance for the

quarter; the MSCI U.S. REIT Index rose 2.4%. Private real estate fared better; the NPI was up 3.6% for the quarter.

#### 4th Quarter 2007

Concerns regarding a recession crept into investors' minds after multiple pieces of negative economic news hit the market. The concerns included a weakening housing market, the impact of sub-prime exposure on financial institutions, rising oil prices, increasing unemployment rates, slowing economic growth and rising inflation. GDP growth was 0.6% for the quarter. The unemployment rate rose to 5.0% from 4.7% in the third quarter. The CPI index rose by 5.6% year-over-year. The Fed Funds rate was cut to 4.25% during the quarter from 4.75%.

The developed domestic and international equity markets were both in negative territory for the quarter. The S&P 500 declined 3.3% during the fourth quarter, outperforming small caps but underperforming mid caps. The S&P MidCap Index fell 2.7% while the S&P SmallCap Index declined 6.4%. Growth significantly outperformed value across the cap spectrums. International equity markets were also in negative territory. The MSCI EAFE Index declined 1.7% in U.S. dollar terms for the quarter. The MSCI ACWI ex U.S. Index fell by 0.6%. Spain was the strongest performing developed market in U.S. dollar terms. Emerging markets outperformed their developed market counterparts. The MSCI EM Index appreciated 3.7% in U.S. dollar terms.

The Lehman Brothers Aggregate Index performed better than the developed equity markets and

## Investment Report

advanced 3.0% during the quarter. Longer-term issues outperformed short-term issues. Higher-quality issues outperformed lower-quality issues in the investment credit space. Mortgages returned 3.1% during the quarter while Treasuries appreciated 4.0% during the quarter.

REITs exhibited significantly negative performance; the MSCI U.S. REIT Index declined 13.2% for the quarter. Private real estate fared considerably better; the NPI was up 3.2% for the quarter.

### 1st Quarter 2008

Economic conditions continued to weaken during the first quarter due to surging oil prices, depressed housing prices and rising unemployment rates. GDP growth was 0.6% for the quarter. The unemployment rate rose to 5.1% from 5.0% in the fourth quarter. The CPI Index grew 3.1% year-over-year. The Fed Funds rate was cut significantly from 4.25% to 2.25% during the quarter as fears of a recession escalated.

The equity markets had a poor quarter domestically and internationally. The S&P 500 declined 9.4% during the first quarter, underperforming both mid and small caps. The S&P MidCap Index fell 8.8% while the S&P SmallCap Index declined 7.5%. Value outperformed growth across the cap spectrums. International equity markets were also in negative territory. The MSCI EAFE Index declined 8.8% in U.S. dollar terms for the quarter. The MSCI ACWI ex U.S. Index fell by 9.1%. Denmark was the sole developed market with a positive return in U.S. dollar terms. Emerging markets fared worse than their developed counterparts. The MSCI EM Index declined 10.9% in U.S. dollar terms.

The Lehman Brothers Aggregate Index performed significantly better than equity markets and

advanced 2.2% during the quarter. Longer-term issues lagged shorter-term issues. The flight to quality continued and resulted in higher-quality issues outperforming lower-quality issues in the investment credit space. Mortgages returned 2.4% while Treasuries appreciated 4.4%.

REITs posted positive returns in the second quarter; the MSCI US REIT Index advanced 2.1%. Private real estate fared slightly worse; the NPI had a 1.6% return.

### 2nd Quarter 2008

The economy saw continued weakness in the second quarter with investors shaken by a rise in the unemployment rate, oil reaching new highs and further financial write-downs. The preliminary estimate of GDP growth was 1.9%. The unemployment rate rose from 5.1% in the first quarter to 5.5%. The CPI Index grew 7.9% year-over-year, largely attributable to volatile food and energy prices. The Fed Funds rate was cut from 2.25% to 2.00% in April, then remained unchanged in June.

Domestic equity performed better in the second quarter than the first quarter, despite poor performance in June. The S&P 500 Index declined 2.7% for the quarter. Large cap stocks underperformed both mid and small caps. The S&P 400 MidCap Index returned 5.4% and the S&P 600 SmallCap Index gained 0.4%. Growth outperformed value across the cap spectrums. International equity markets were in negative territory. The MSCI EAFE Index returned 1.9% in U.S. dollar terms for the quarter. The MSCI ACWI ex U.S. Index fell by 0.9%. Norway and Canada outperformed other developed markets in U.S. dollar terms. Emerging markets outpaced their developed counterparts. The MSCI EM Index fell 0.8% in U.S. dollar terms.

The Lehman Brothers Aggregate Index declined 1.0% during the second quarter. Shorter term issues

## Investment Report

continued to outpace longer-term issues. Lower-quality issues outperformed higher-quality issues in the investment credit space, a reversal of the flight to quality over the past six months. Mortgages lost 0.5% while Treasuries fell 2.1% during the quarter.

REITs struggled in the second quarter; the MSCI U.S. REIT Index declined 5.5%. Private real estate fared better; the NPI posted a 0.6% return.

### Investment Goals

1. Achieve a total fund rate of return equal to or greater than the actuarial assumed interest rate.
2. Achieve a total fund rate of return equal to or greater than the asset allocation benchmark.
3. Achieve a total fund rate of return equal to or greater than the amount projected in the most recent asset allocation study.
4. Achieve asset class net rates of return equal to or greater than their respective broad asset class benchmarks.
5. Achieve portfolio-level net rates of return equal to or greater than their respective portfolio benchmarks.
6. Ensure sufficient monies are available to meet cash flow requirements

### Asset Allocation Targets

Effective January 2007, the ASRS asset allocation policy targets and ranges are as follows:

U.S. Equity	45% (40-50%)
U.S. Fixed Income	26% (21-31%)
International Equity	18% (13-30%)
Real Estate *	6% (4-8%)
Private Equity *	5% (3-7%)

\*Pro-rated into other asset classes during the program(s) implementation.

Additionally, the ASRS asset allocation includes Opportunistic Asset Classes and Absolute Return Strategies each of which have a 0% target allocation and ranges of 0-5%.

### Investment Policies

An integral part of the overall investment policy is the strategic asset allocation policy, which is designed to optimize returns while minimizing risk. The ASRS maintains its investment assets in accordance with Board approved strategic asset allocation policy. Investment assets are managed in 28 externally managed and 6 internally managed portfolios, which are diversified in U.S. equities, U.S. fixed income, international equities, real estate and private equity.

The ASRS adheres to all statutory requirements set by Arizona State law. In addition the ASRS established investment guidelines for its internal and external investment managers and a complete set of policies, procedures, compliance requirements, and oversight of internal investment management to ensure that investment assets are prudently managed. Both internal and external compliance procedures are in place. Oversight and direction responsibilities reside with the ASRS Board. Details of investments are located at the end of this report.

### Investment Results

For the Fiscal Year Ended June 30, 2008, the ASRS posted a 7.6% loss, which underperformed the ASRS actuarial assumed investment rate of return by 15.6%.

## Investment Results

### Performance Accounting/ Computation Standards

The ASRS investment performance rates of return are calculated on a total return basis, using time-weighted rates of return, based upon market values. Investment amounts are reflected at Fair Market Value.

Performance is calculated on an accrual basis provided that the accrual information is available

from the custodian or record-keeper. The rates of return are generated by asset class and include cash holdings.

Below are the rates of return on the overall portfolio, as well as specific asset classes, along with the benchmark used to compare performance.

### Annualized Rates of Return

*(Retirement & HBS)*

	1 Year	3 Year	5 Year	10 Year	Inception June 30, 1975
ASRS Total Fund	-7.6%	6.1%	8.8%	5.5%	10.4%
ASRS Domestic Equity	-12.6%	4.8%	8.8%	4.1%	
S&P Custom Index	-12.6%	4.9%	7.9%	3.1%	
ASRS Domestic Fixed Income	6.6%	4.0%	3.8%	5.6%	
Lehman Aggregate Index	7.1%	4.1%	3.9%	5.7%	
ASRS International Equity	-10.9%	12.3%	16.1%	7.8%	
MSCI ACWI ex-US/EAFE Index	-6.2%	15.7%	18.6%	6.9%	
ASRS Real Estate	-9.3%	n/a	n/a	n/a	
NPI+ 100 Index	14.6%	17.8%	16.1%	13.7%	

### Historical Rates of Return

*(Retirement & HBS)*

Fiscal Year	Return	Fiscal Year	Return	Fiscal Year	Return
2007-08	-7.60%	1999-00	10.00%	1991-92	14.62%
2006-07	17.80%	1998-99	16.80%	1990-91	7.99%
2005-06	9.80%	1997-98	21.30%	1989-90	9.52%
2004-05	8.50%	1996-97	20.60%	1988-89	14.33%
2003-04	17.50%	1995-96	16.70%	1987-88	3.10%
2002-03	2.40%	1994-95	17.78%	1986-87	11.80%
2001-02	-8.20%	1993-94	1.89%	1985-86	31.50%
2000-01	-6.70%	1992-93	16.74%	1984-85	32.10%

## Investment Results

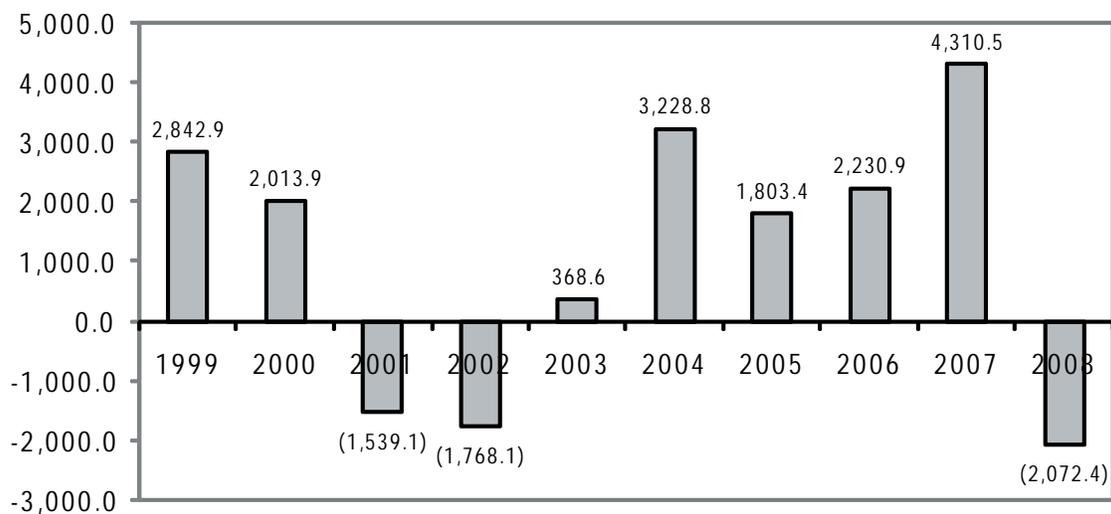
### Monthly Returns

(Retirement & HBS)

	Total Fund	US Equity	Fixed Inc	Intl Equity
7/31/2007	-2.06%	-3.64%	0.77%	-1.09%
8/31/2007	0.77%	1.35%	1.19%	-1.47%
9/30/2007	2.76%	3.31%	0.76%	3.74%
10/31/2007	1.68%	1.71%	0.91%	4.09%
11/30/2007	-2.87%	-4.65%	1.62%	-3.28%
12/31/2007	-0.75%	-0.56%	0.26%	-2.28%
1/31/2008	-4.50%	-6.22%	1.55%	-7.94%
2/29/2008	-1.31%	-2.84%	0.04%	0.84%
3/31/2008	-0.64%	-0.59%	0.08%	-2.11%
4/30/2008	3.85%	5.49%	0.01%	6.01%
5/31/2008	1.35%	2.29%	-0.67%	1.78%
6/30/2008	-5.95%	-8.10%	-0.08%	-8.66%

### Net Income from Investments

(Dollars in Millions)



## Investment Results

### Ten Year Review of Investment Income

*(Dollars in Thousands)*

**Fiscal**

<b>Year</b>	<b>Invest Income</b>	<b>+ Market Appr</b>	<b>- Invest Expense</b>	<b>= Net Income</b>
1998-99	\$394,337	\$2,474,779	\$26,215	\$2,842,901
1999-00	416,594	1,625,595	28,273	2,013,916
2000-01	527,329	(2,038,932)	27,525	(1,539,128)
2001-02	485,535	(2,228,394)	25,218	(1,768,077)
2002-03	442,870	(51,437)	22,801	368,632
2003-04	447,623	2,811,047	29,885	3,228,785
2004-05	454,389	1,382,587	33,584	1,803,392
2005-06	523,997	1,758,899	51,957	2,230,939
2006-07	604,320	3,766,089	59,891	4,310,518
2007-08	654,878	(2,645,900)	81,419	(2,072,441)

## Asset Allocation

### Schedule Of Investments

(Dollars in Thousands)

	Investments at Fair Value	Receivables	Payables	Total	% of Total
Corporate Equity Securities	\$17,514,562	\$-	\$-	\$17,514,562	67.4%
Fixed Income Securities					
Corporate Debt Securities	2,466,076	-	-	2,466,076	9.5
U.S. Treasury & Government Securities	4,392,007	-	-	4,392,007	16.9
Real Estate	513,861	3,866	-	517,727	2.0
Private Equity	129,339	52	10,560	118,831	.5
Opportunistic Securities Lending	76,426	-	-	76,426	.3
	3,794,246	-	3,794,246	-	-
Temporary Investments	1,641,778	2,105,043*	2,854,352**	892,469	3.4
<b>Total Investments</b>	<b>\$30,528,295</b>	<b>\$2,108,961</b>	<b>\$6,659,158</b>	<b>\$25,978,098</b>	<b>100.0%</b>

#### \*Receivables Include:

Accrued Int & Dividends	\$ 73,166
Securities Sold	432,168
Forward Contracts Rec	1,599,699
Other Receivables	10
<b>TOTAL</b>	<b>\$2,105,043</b>

#### \*\*Payables Include:

Payable for Securities Purchased	\$1,245,434
Forward Contract Payable	1,608,409
Other Payables	509
<b>TOTAL</b>	<b>\$2,854,352</b>

Note: A detail listing of investments is available upon request. Direct inquiries to: ASRS, 3300 North Central Avenue, Phoenix, AZ 85012.

## Equity Portfolio Profile

### Equity Sub-Sector Allocation

*(Dollars in Thousands)*

	Percent of Fund	Fair Market Value
US Large Cap Equity	36.87%	\$9,496,897
US Mid Cap Equity	7.07	1,819,683
US Small Cap Equity	6.98	1,797,614
	50.92%	\$13,114,194
<b>Total US Equity</b>	<b>50.92%</b>	<b>\$13,114,194</b>
	17.09%	\$ 4,400,368
<b>International Equity</b>	<b>17.09%</b>	<b>\$ 4,400,368</b>
	68.01%	\$17,514,562
<b>Total Equity</b>	<b>68.01%</b>	<b>\$17,514,562</b>

### Ten Largest Domestic Equity Holdings

	% Of Domestic Equity Portfolio
EXXON MOBIL CORP	2.15%
CHEVRON CORPORATION COM	0.90
GENERAL ELEC CO COM	0.87
MICROSOFT CORP COM	0.86
AT & T INC COM	0.80
PROCTER & GAMBLE CO COM	0.79
IBM CORP COM	0.73
JOHNSON & JOHNSON COM	0.71
CONOCOPHILLIPS	0.69
APPLE COMPUTER INC	0.68
<b>TOTAL</b>	<b>9.18%</b>

Note: A detail listing of investments is available upon request. Direct inquiries to: ASRS, 3300 North Central Avenue, Phoenix, AZ 85012.

## Equity Portfolio Profile

### Distribution by Market Sector

	ASRS Domestic Equity	S&P 500 Index
FINANCIALS	13.85%	14.27%
HEALTH CARE	12.71	11.91
UTILITIES	3.87	3.99
CONSUMER DISCRETIONARY	9.76	8.12
CONSUMER STAPLES	8.74	10.80
ENERGY	15.35	16.20
INFORMATION TECHNOLOGY	15.99	16.42
MATERIALS	4.55	3.83
TELECOMMUNICATION SVCS	2.41	3.32
INDUSTRIALS	12.77	11.14
<b>TOTAL</b>	<b>100.01%</b>	<b>100.00%</b>

### Ten Largest International Equity Holdings

	% Of International Equity Portfolio
GLAXOSMITHKLINE ORD GBP0.25	1.42%
NESTLE SA CHF1	1.31
ASTRAZENECA ORD USD0.25	1.28
DEUTSCHE TELEKOM AG NPV (REGD)	1.21
NIPPON TEL & TEL CORP Y50000	1.14
SANOFI-AVENTIS EUR2	1.09
LVMH MOET HENNESSY EUR0.30	1.00
ROCHE HLDG AG GENUSSSCHEINE NPV	0.87
FRANCE TELECOM EUR4	0.85
MIZUHO FINL GP NPV	0.84
<b>TOTAL</b>	<b>11.01%</b>

### Summary of Broker Commissions

	Commission
Domestic Equity	\$5,812,470
International Equity	\$3,021,750

Note: A detail listing of investments is available upon request. Direct inquiries to: ASRS, 3300 North Central Avenue, Phoenix, AZ 85012.

## Fixed Income Portfolio Profile

### Distribution By Sector

	<b>Percent</b>
Asset Backed Securities	2.8%
Commercial Mortgage Backed	9.1
Corporate Bonds	19.2
Government Agencies	9.3
Government Agencies CMO	1.4
Government Bonds	19.0
Government Mortgage Backed	36.9
Non-Government Backed CMOs	2.3
<b>TOTAL</b>	<b>100.0%</b>

### Distribution By Coupon

	<b>Percent</b>
0.00% - 6.5%	89.5%
6.51% - 7.50%	6.4
7.51% - 9.0%	2.9
> 9.00%	1.2
<b>TOTAL</b>	<b>100.0%</b>

### Distribution By Maturity

	<b>Percent</b>
0 to 2 years	11.8%
2 to 3 years	6.0
3 to 4 years	5.0
4 to 5 years	7.3
5 to 6 years	1.6
6 to 8 years	4.1
> 8 years	64.2
<b>TOTAL</b>	<b>100.0%</b>

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## Fixed Income Portfolio Profile

### Ten Largest Domestic Fixed Income Holdings

(Dollars in Thousands)

	Coupon	Maturity	Par Value	Fair Market Value	Percent
COMMIT TO PUR GNMA SF MTG	6.00	7/20/2038	\$63,200	\$64,148	1.05%
COMMIT TO PUR GNMA SF MTG	5.50	7/15/2038	58,200	57,909	0.95%
U S TREASURY NOTES	3.62	5/15/2013	55,000	55,801	0.92%
U S TREASURY NOTES	3.50	2/15/2018	55,505	53,413	0.88%
FNMA POOL #0725205	5.00	3/01/2034	51,880	50,059	0.82%
COMMIT TO PUR FHLMC GOLD SFM	5.50	7/01/2038	58,829	58,665	0.96%
U S TREASURY BONDS	11.25	2/15/2015	29,000	41,973	0.69%
FNMA POOL #0889727	5.50	6/01/2038	59,143	58,947	0.97%
U S TREASURY NOTES	2.62	5/31/2010	40,925	40,954	0.67%
FNMA POOL #0786458	5.00	5/01/2034	41,522	40,007	0.66%
<b>TOTAL</b>				<b>\$521,876</b>	<b>8.57%</b>

## Real Estate Portfolio Profile

### Ten Largest Real Estate Managers

(Dollars in Thousands)

	Fair Market Value	% of Real Estate Portfolio
ASRS OWNED/OCCUPIED REAL ESTATE	\$56,725	11.04%
RREEF GL OPP II	47,863	9.31%
ROTHSCHILD	43,167	8.40%
CIM URBAN REIT	41,734	8.12%
PRISA II	35,778	6.96%
DUNE CAP MGMT	34,941	6.80%
CAPMARK III	31,669	6.16%
CARLYLE RPF V	23,338	4.54%
TISHMAN VII LP	22,611	4.40%
TISHMAN VI FUND	22,451	4.37%
<b>TOTAL</b>	<b>\$360,227</b>	<b>70.10%</b>

Note: A detail listing of investments is available upon request. Direct inquiries to: ASRS, 3300 North Central Avenue, Phoenix, AZ 85012.

## Private Equity Portfolio Profile

### Ten Largest Private Equity Managers

*(Dollars in Thousands)*

	Fair Market Value	% of Private Equity Portfolio
PLATINUM II LP	\$ 26,684	20.63%
TH LEE VI LP	25,163	19.45
WAYZATA OPP II	14,709	11.37
WARBURG PINCUS X LP	10,400	8.04
LEVINE LMAN IV	8,851	6.84
PAUL CAPITAL IX LP	8,623	6.67
RESOLUTE FND II	5,384	4.16
PINE BROOK II	4,571	3.53
NEW MOUNTAIN III	4,473	3.46
SILVER LAKES	\$4,441	3.43
<b>TOTAL</b>	<b>\$113,299</b>	<b>87.60%</b>

## Opportunistic Portfolio Profile

### Largest Opportunistic Equity Managers

*(Dollars in Thousands)*

	Fair Market Value	% of Opportunistic Portfolio
BLACKROCK MORTGAGE INVESTORS FUND	\$ 76,426	100.00%
<b>TOTAL</b>	<b>\$76,426</b>	<b>100.00%</b>

Note: A detail listing of investments is available upon request. Direct inquiries to: ASRS, 3300 North Central Avenue, Phoenix, AZ 85012.

## Schedule of Broker Commissions - Domestic Equity Trades

Domestic Broker Name	Total Dollar Amount of Trades	Number of Shares	Average Commission Per Share	Commission
INVESTMENT TECHNOLOGY GROUPS	3,496,033,604	106,781,429	0.01	\$990,792
LEHMAN BROS INC	1,009,514,446	33,088,898	0.01	391,547
CITIGROUP GBL MKTS INC	690,075,263	20,175,875	0.01	246,887
CREDIT SUISSE	492,355,053	10,817,854	0.02	240,033
INSTINET CORP	430,074,628	14,223,484	0.02	264,606
GUZMAN & CO	339,801,067	6,447,750	0.03	170,088
JNK SECURITIES INC	322,858,039	8,383,473	0.01	92,020
JEFFERIES & CO INC	280,344,329	6,127,996	0.02	134,112
LIQUIDNET INC	256,428,193	8,169,689	0.02	186,416
UBS SECURITIES LLC	217,009,952	4,918,979	0.02	114,017
FRANK RUSSELL SEC INC	216,849,125	6,179,800	0.03	180,566
MERRILL LYNCH PIERCE FENNER SMITH INC	185,276,392	3,905,853	0.02	61,853
ROSENBLATT SECURITIES LLC	180,713,169	3,893,582	0.02	95,895
GOLDMAN SACHS & CO,	169,584,700	3,851,600	0.03	120,201
DEUTSCHE BK SECS INC	169,070,802	3,912,066	0.03	116,715
BNY CONVERGEX / LJR	168,158,559	3,590,142	0.02	84,681
WEEDEN & CO	164,048,628	3,977,459	0.03	100,575
LEHMAN BROS INTL	120,515,298	8,019,500	0.00	36,559
CANTOR FITZGERALD & CO INC	117,385,681	2,953,696	0.03	86,608
BEAR STEARNS & CO INC	115,408,119	2,956,514	0.04	118,627
CAP INSTL SVCS INC-EQUITIES	107,488,335	2,667,965	0.03	77,050
ACCESS SECURITIES INC	86,555,545	1,929,423	0.02	48,236
MORGAN STANLEY & CO INC	84,174,182	2,535,232	0.03	80,779
FIDELITY CAP MKTS (DIV OF NFSC)	80,247,115	2,118,606	0.03	65,984
MERRILL LYNCH PROFESSIONAL CLRG	75,633,522	2,241,539	0.03	67,479
CUTTONE & CO INC	70,327,874	1,638,050	0.03	40,951
JONESTRADING INSTL SVCS LLC	68,571,486	2,179,079	0.03	69,160
MORGAN J P SECS INC	67,755,340	1,576,996	0.04	70,146
BANC OF AMERICA SECS LLC	54,497,586	1,340,500	0.04	53,020
CIBC WORLD MARKETS CORP	52,706,751	1,309,295	0.03	44,855
RIDGE CLEARING & OUTSOURCING	50,472,158	1,128,850	0.03	29,637
THOMAS WEISEL PARTNERS	50,076,497	1,379,775	0.04	60,184
BERNSTEIN SANFORD C & CO	45,957,668	1,507,646	0.03	44,507
COWEN AND COMPANY LLC	45,393,947	1,139,995	0.05	51,916
WILLIAM BLAIR & CO	44,897,596	1,167,469	0.04	51,684
LABRANCHE FINANCIAL SVCS LLC	44,840,892	1,089,200	0.03	30,610
BEAR STEARNS SEC CORP	43,843,396	1,332,317	0.03	46,487

## Schedule of Broker Commissions - Domestic Equity Trades

Domestic Broker Name	Total Dollar Amount of Trades	Number of Shares	Average Commission Per Share	Commission
CITATION GROUP	42,355,216	1,333,643	0.04	52,156
OPPENHEIMER & CO INC	41,138,261	1,470,141	0.05	67,962
ROCHDALE SECURITIES CORP	39,301,001	853,644	0.03	23,236
WACHOVIA CAPITAL MARKETS LLC	38,291,862	1,473,387	0.05	67,677
PIPER JAFFRAY & CO	33,667,002	987,009	0.04	44,144
MERRILL LYNCH PIERCE FENNER	32,508,116	1,031,436	0.01	10,301
BAIRD, ROBERT W & CO INC	32,227,601	1,017,821	0.04	45,442
GOLDMAN SACHS EXECUTION & CLEARING	29,907,661	882,785	0.01	8,875
CANACCORD ADAMS INC	26,512,106	676,718	0.04	28,477
UNX COM	23,336,637	1,291,942	0.02	19,965
FIRST ALBANY CAPITAL INC	22,636,134	575,900	0.03	16,058
NUTMEG SECURITIES	21,272,085	683,461	0.03	23,429
STIFEL NICOLAUS	21,088,324	516,548	0.05	23,795
KEYBANC CAPITAL MARKETS INC	20,890,254	491,846	0.04	21,944
ABEL NOSER CORP	18,171,925	611,728	0.02	10,578
RAYMOND JAMES & ASSOC INC	16,623,038	427,561	0.04	18,820
KNIGHT SEC BROADCAST	16,136,101	342,171	0.03	11,705
BNY CONVERGEX	15,818,674	441,225	0.04	18,535
BLOOMBERG TRADEBOOK LLC	15,705,243	491,900	0.02	7,379
SUNTRUST CAPITAL MARKETS INC	15,629,936	420,261	0.04	18,356
STEPHENS INC	15,496,432	371,678	0.04	16,649
PULSE TRADING LLC	15,101,312	299,579	0.02	6,442
MORGAN KEEGAN & CO INC	14,562,093	417,458	0.04	18,514
FUTURETRADE SECURITIES LLC	14,162,937	430,332	0.01	2,582
BNY BROKERAGE, NEW YORK	14,140,166	734,326	0.05	34,181
KEEFE BRUYETTE AND WOODS	13,263,508	416,972	0.04	18,264
PACIFIC CREST SEC	12,826,080	491,900	0.05	24,085
BNY ESI & CO INC	12,637,372	393,700	0.05	19,685
MIDWEST RESEARCH SECURITIES	11,355,023	316,141	0.04	12,629
ROTH CAPITAL PARTNERS LLC	11,173,008	416,336	0.04	16,454
SCOTT STRINGFELLOW INC	10,843,979	199,857	0.04	8,216
BOENNING & SCATTERGOOD	10,095,569	315,700	0.02	6,939
OTHER	278,221,046	12,617,167	0.03	323,514
<b>GRAND TOTAL</b>	<b>\$11,172,040,638</b>	<b>324,099,849</b>		<b>\$5,812,470</b>

Note: A detail listing of broker commissions is available upon request. Direct inquiries to: ASRS, 3300 North Central Avenue, Phoenix, AZ 85012.

## Schedule of Broker Commissions - Foreign Equity Trades

Domestic Broker Name	Total Dollar Amount of Trades	Number of Shares	Average Commission Per Share	Commission
CREDIT SUISSE	\$171,418,812	5,655,743	0.03	\$197,727
GOLDMAN SACHS & CO	170,109,166	15,994,713	0.01	213,794
LEHMAN BROS INTL	165,887,575	18,666,433	0.01	242,727
MORGAN STANLEY & CO INC	127,265,603	7,406,714	0.02	176,004
CITIGROUP GLOBAL MARKETS LTD	122,534,639	16,533,969	0.01	152,062
CANTOR FITZGERALD EUROPE	106,977,778	29,104,271	0.00	42,696
J P MORGAN SECS LTD	90,338,936	11,220,216	0.01	120,606
BEAR STEARNS & CO INC	87,023,089	10,756,404	0.01	104,653
UBS EQUITIES	85,895,620	3,168,999	0.04	136,203
UBS WARBURG ASIA LTD	77,598,767	12,715,434	0.01	91,837
MERRILL LYNCH INTL	74,361,549	4,005,358	0.03	126,203
DEUTSCHE BK SECS INC	74,357,725	7,412,958	0.01	107,856
MERRILL LYNCH PIERCE FENNER	59,240,183	3,765,557	0.02	57,419
CREDIT LYONNAIS SECS	58,065,811	1,817,948	0.03	62,741
LEHMAN BROS INC	54,418,878	1,189,480	0.03	34,094
CREDIT AGRICOLE CHEUVREUX	51,836,360	3,033,033	0.02	49,458
MIZUHO SECURITIES USA INC.	51,153,243	2,047,700	0.02	36,778
CITIGROUP GBL MKTS/SALOMON	50,164,178	3,156,112	0.02	55,803
ABN AMRO BANK NV	48,883,820	5,398,665	0.01	45,916
ITG (EUROPE) LTD	48,019,950	7,789,993	0.00	19,172
SG SEC (LONDON) LTD	43,801,597	2,355,981	0.03	76,111
CREDIT SUISSE (EUROPE)	43,119,209	1,346,919	0.06	75,371
DAIWA SECS AMER INC	42,813,533	5,434,232	0.00	18,237
ABN AMRO SECS LLC	42,408,321	1,151,981	0.06	64,614
INSTINET EUROPE LIMITED	36,544,522	7,716,518	0.00	13,620
DRESDNER KLEINWORT SECS LTD	31,275,730	5,669,243	0.01	44,815
NOMURA SECS INTL	29,524,048	3,914,285	0.00	5,330
HSBC SECS INC	29,108,751	2,522,979	0.02	39,421
MACQUARIE EQUITIES LTD	28,000,305	8,700,244	0.00	7,370
INSTINET CORP	25,825,987	2,596,514	0.00	10,023
PERSHING DIVISION OF DLJ	24,882,932	963,128	0.04	41,719
BERENBERG GOSSLER & CIE	24,569,325	1,075,225	0.01	9,827
CITIGROUP GBL MKTS INC	24,206,929	1,034,770	0.04	44,116
MERRILL LYNCH PIERCE FENNER SMITH INC	24,013,953	328,829	0.02	5,465
CITIGROUP GLOBAL MARKETS U.K.	23,303,477	6,007,375	0.01	30,155
NOMURA SECS INTL INC	21,668,643	1,589,027	0.01	16,229
MACQUARIE SECURITIES LIMITED	20,026,885	5,518,677	0.00	18,667

## Schedule of Broker Commissions - Foreign Equity Trades

Domestic Broker Name	Total Dollar Amount of Trades	Number of Shares	Average Commission Per Share	Commission
CAZENOVE & CO	16,719,209	1,880,108	0.00	6,843
CALYON SECURITIES	14,781,864	9,266,166	0.00	26,984
DEUTSCHE BK INTL EQ	14,741,397	1,763,465	0.00	2,776
JP MORGAN SECS ASIA PACIFIC	14,272,776	7,952,114	0.00	4,575
UBS SECURITIES LLC	13,654,329	369,125	0.04	14,313
NOMURA INTERNATIONAL (HK) LTD	13,633,728	5,640,262	0.00	8,170
CHASE BK	13,314,198	101,652	0.20	19,980
PERSHING SECURITIES LTD	11,398,848	577,167	0.03	18,219
OTHER	248,307,031	51,503,390	0.01	325,050
<b>GRAND TOTAL</b>	<b><u>\$2,651,469,210</u></b>	<b><u>307,819,076</u></b>		<b><u>\$3,021,750</u></b>

Note: A detail listing of broker commissions is available upon request. Direct inquiries to: ASRS, 3300 North Central Avenue, Phoenix, AZ 85012.



**Arizona State Retirement System**  
A Component Unit of the State of Arizona



**2008**  
**Actuarial**  
**Section**



## **Table of Contents**

### **IV. Actuarial Section**

#### ***Plan and HBS***

Actuarial Certification Statement - Plan and HBS .....	84
Actuarial Valuation of the ASRS Plan. ....	88
General Actuarial Information - Plan and HBS .....	91
Summary of Benefit Provisions - Plan and HBS. ....	94
Statement of Actuarial Methods and Assumptions Used in Determining Cost - Plan and HBS ..	99
Schedule of Plan Active Member Valuation Data – Last 6 Years .....	104
Schedule of Plan Retirees Added to and Removed from Rolls – Last 6 Years .....	104
Schedule of Unfunded (Over) Accrued Liabilities – Plan – Last 10 Years .....	105
Solvency Test – Last 10 Years .....	106
Schedule of Recommended vs. Actual Plan Contributions – Last 10 Years .....	107
Analysis of Financial Experience for the Plan .....	108

#### ***LTD***

Actuarial Certification Statement - LTD .....	109
General Actuarial Information - LTD .....	112
Summary of the Benefit Provisions - LTD .....	113
Statement of Actuarial Methods and Assumptions Used in Determining Cost - LTD .....	115
Schedule of Benefit Recipients Added to and Removed from Rolls - Last 6 Years. ....	117
Schedule of Unfunded (Over) Accrued Liabilities - LTD - Last 6 Years .....	117
Solvency Test - Last 6 Years .....	118
Schedule of Recommended vs. Actuarial LTD Contributions - Last 10 Years .....	118
Analysis of Financial Experience for LTD .....	119

#### ***Legislative Plan Changes - Plan, HBS and LTD***

Summary of Legislative Plan Changes .....	121
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## Actuarial Certification - Plan and HBS

### Actuarial Certification Statement

This is to certify that Buck Consultants has prepared an actuarial valuation of the Arizona State Retirement Plan as of June 30, 2007. The Plan provisions are described in Title 38, Chapter 4, Article 2 of the Arizona Revised Statutes. All benefits described in the statutes are reflected in this valuation, except that future PBI and enhanced PBI awards are not valued.

Actuarial calculations have been made with respect to a total of 506,362 members – 224,001 active members, 193,696 inactive members, and 83,594 retired members and beneficiaries, and 5,071 members on long term disability. In addition, there are 613 System retirees receiving ad hoc benefits from Plan assets.

The actuarial calculations establish a total benefit cost of 17.90% of the annual compensation of members. The total normal cost rate is 12.93% of compensation, and the required amortization payment determined in accordance with Section 38-737 is 4.95% of compensation.

The actuarial cost factors as of June 30, 2007 are as follows:

I. Actuarial accrued liabilities

A. Liabilities due to member's benefits

1. Active members

a. Retirement benefits	\$12,442,215,899
b. Health insurance premium supplement	946,156,185
c. Disability deferred retirement benefits	627,965,761
d. Pre-retirement death benefits	316,030,712
e. Withdrawal benefits	<u>582,410,255</u>
f. Total active members	\$14,914,778,812

2. Inactive members 1,290,997,831

3. Retired members and beneficiaries 15,229,303,602

4. Disabled members (deferred retirement) 549,801,048

5. Benefit increases for other-than-plan participants 10,790,133

6. Total present value of benefits \$31,995,671,426

B. Other miscellaneous liabilities and reserves 0

C. Reserve for future PBIs 0

D. Total actuarial accrued liability \$31,995,671,426

II. Actuarial value of assets \$26,476,687,905

III. Unfunded actuarial accrued liability (Item I - Item II) 5,518,983,521

IV. Amortization of unfunded actuarial accrued liability (per Section 38-737) \$ 453,925,357

V. Normal cost for the year 1,185,342,610

VI. Total contribution for the year (Item IV + Item V) \$ 1,639,267,967

VII. Total covered payroll (projected to 2006/2007 plan year) 9,161,803,726

VIII. Total contribution for fiscal years 2009 as a percentage of covered payroll

	401(a) Account	401(h) Account	Total
A. Employee Portion	8.95%	0.00%	8.95%
B. Employer Portion	7.99%	0.96%	8.95%
C. Total	16.94%	0.96%	17.90%

## Actuarial Certification - Plan and HBS

The Board adopted a new asset valuation method on November 15, 2002, to be effective for valuations on and after June 30, 2002.

On November 21, 2003, the Board adopted assumptions to be effective for valuations on and after June 30, 2003. These assumptions are as follows:

1. Investment yield - 8% per annum.
2. Salary increases

Years of Service	Merit Component	Total Salary Increase
1	5.00%	9.50%
2	4.00	8.50
3	2.50	7.00
4	1.80	6.30
5	1.40	5.90
6	1.25	5.75
7	1.00	5.50
8	0.80	5.30
9	0.75	5.25
10	0.50	5.00
11 to 19	0.25	4.75
20 or more	0.00	4.50

3. Rates of disability

Age	Males	Females
20	0.06%	0.07%
30	0.07	0.10
40	0.21	0.21
50	0.51	0.49
60	1.20	1.09

4. Rates of withdrawal - Sample ages and years of service

Age	Years of Service - Male Members				
	1	2	5	8	10+
20	36.42%	28.95%	13.64%	7.11%	12.77%
30	20.55	16.12	9.43	5.14	5.65
40	16.98	10.11	6.65	4.00	2.27
50	16.92	9.04	5.02	3.45	1.55
60	18.24	9.63	3.71	2.61	1.08

## Actuarial Certification - Plan and HBS

Age	Years of Service - Female Members				
	1	2	5	8	10+
20	30.53%	26.40%	20.77%	13.80%	21.48%
30	19.37	16.52	10.89	8.11	8.21
40	16.93	11.74	6.61	4.61	2.39
50	14.57	9.27	5.22	2.87	1.67
60	14.32	9.39	4.66	2.37	0.88

5. Rates of retirement - Sample ages and years of service

Age	Years of Service - Male Members				
	10-14	20-24	25	30	31+
50	4.55%	5.55%	8.55%	19.05%	14.05%
55	4.13	7.13	17.38	18.63	13.63
60	8.08	24.83	27.83	36.08	31.08
62	31.10	41.10	44.10	56.10	51.10
65	31.23	31.23	34.23	36.23	31.23
70	31.80	31.80	34.80	36.80	31.80

Age	Years of Service - Female Members				
	10-14	20-24	25	30	31+
50	4.67%	5.67%	8.67%	19.17%	14.17%
55	4.25	7.25	17.50	18.75	13.75
60	7.88	24.63	27.63	35.88	30.88
62	30.83	40.83	43.83	55.83	50.83
65	30.92	30.92	33.92	35.92	30.92
70	31.44	31.44	34.44	36.44	31.44

Due to the valuation software change, the retirement rates this year include both retirement and withdrawal rates.

Deferred vested members are assumed to retire at their normal retirement age.

6. Mortality rates – 1994 GAM – Static, Projected to 2005 with Projection Scale AA, with no setback.
7. Mortality rates after disability - Post disablement mortality rates are based on experience of other large public sector systems and ASRS' own experience.
8. Future Retirees Eligible for the Health Insurance Premium Supplement - It is assumed that 75% of future retirees will be eligible to receive the post-retirement health insurance premium supplement and that 60% of those retirees will be eligible for the dependent premium supplement.

9. Proportion of Vested Termination Members Who Will Not Withdraw Their Contributions - It is assumed that members who terminate with five or more years of service (but prior to eligibility for retirement) will choose to receive the enhanced refund option if the value of the enhanced refund option is greater than the present value of the deferred benefit. Otherwise, the members are assumed to elect to receive the deferred benefit. If the member is assumed to elect the enhanced refund option, then it is also assumed that the member forfeits the health insurance premium supplement.

Members who terminate with less than five years of service are assumed to withdraw their member contributions with interest.

Members who terminate eligible for early retirement are assumed to commence payments.

10. Spouse Assumptions - We assume that 100% of the members are married. We also assume that the husband is three years older than the wife.
11. Valuation assets - Market value less ten year phase-in of Excess (Shortfall) Investment income.
12. Funding method - Projected unit-credit, as prescribed in Arizona Revised Statutes Section 38.757A.

The actuarial calculations have been performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the Plan and on the actuarial assumptions adopted by the Board.

ASRS prepared all trend data schedules in the financial section and the supporting schedules in the actuarial section of its Comprehensive Annual Financial Report.



Charles E. Chittenden, FSA, EA, MAAA  
Principal and Consulting Actuary

## Actuarial Valuation of The Plan as of June 30, 2007

January 23, 2008

Retirement Board  
Arizona State Retirement System  
3300 North Central Avenue  
14th Floor  
Phoenix, Arizona 85012

Dear Retirement Board Members:

### Actuarial Valuation of the Plan as of June 30, 2007

We certify that the information contained in the attached 2007 actuarial valuation report is accurate and fairly presents the actuarial position of the Arizona State Retirement Plan (the Plan) as of June 30, 2007.

We have made all calculations for this report in conformity with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, the report's results comply with the requirements of the Arizona Constitution and statutes and, where applicable, the Internal Revenue Code, the Employee Retirement Income Security Act of 1974 (ERISA), and the Statements of the Governmental Accounting Standards Board. The undersigned actuaries are independent. They are both Enrolled Actuaries, members of the American Academy of Actuaries and Fellows of the Society of Actuaries. Both are experienced in performing valuations for large public retirement systems and are fully qualified to provide actuarial services to the State of Arizona.

### Actuarial Valuations

The primary purpose of the valuation report is to determine the required member and employer contribution rates, to describe the current financial condition of the Plan, and to analyze changes in the Plan's condition. In addition, the report provides information that ASRS requires in connection with Governmental Accounting Standards Board Statement Number 25 and 43 (GASB Nos. 25 and 43), and it summarizes census data.

Valuations are performed annually, as of June 30, the last day of both the Plan year and ASRS' fiscal year.

### Funding Objectives

The actuarial valuation calculates the contribution rates payable by members and participating employers. These rates, when applied to payroll, yield contribution amounts sufficient to provide for the normal cost and to amortize the Unfunded Actuarial Accrued Liability (UAAL) over the period specified in the statutes. The rate calculated becomes effective for the next Plan year. For example, the rate calculated in June 30, 2007, valuation report (8.95% for each member and each employer) is applicable for the fiscal year beginning July 1, 2008.

## **Actuarial Valuation of The Plan as of June 30, 2007**

### **Funding Progress**

The Legislature adopted a stair-step approach to increasing contribution rates, and set the rate at 6.9% for fiscal year 2006 and 8.6% for fiscal year 2007. The 2006 valuation calculates the rate for fiscal 2008 as 9.10%. The 2007 valuation calculates a rate of 8.95% to become effective July 1, 2008. These rates do not include contributions to the LTD program. Actual contributions have matched the calculated contributions in recent years except for temporary differences, and we assume that members and employers will continue to contribute the actuarially determined amounts. Contributing these amounts ensures the realization of funding objectives.

Section 38-737 of the Arizona Revised Statutes specifies that the UAAL is to be amortized over a rolling 30-year period.

### **Benefit Provisions**

This valuation reflects the following changes in Plan provisions:

1. Legislature changed offset percentages for Social Security disability and retirement benefits and increased the pre-existing condition period for the LTD program.
2. Legislature extended the temporary Rural Health Insurance Subsidy for two years.
3. Post-doctoral scholars are exempt from ASRS membership.
4. Legislature expanded eligibility for Active Military Service Credit.

Section 11 gives details of benefit provisions.

### **Assumptions and Methods**

We performed an experience study for the five-year period ended June 30, 2002, and recommended assumption changes based on the findings. On November 21, 2003, the Board adopted our recommended actuarial assumptions, to be effective June 30, 2003.

On November 15, 2002, the Board adopted a change in the method of valuing actuarial assets. The Board removed the requirement that actuarial assets be within 20% of market value and prospectively changed the period for recognizing investment gains or losses from five to ten years. Section 9 of this report provides details of the assumptions and methods. The assumptions are internally consistent and are reasonably based on the actual experience of the Plan. These assumptions are in full compliance with GASB Statement Nos. 25 and 43.

### **Data**

ASRS staff supplied census data for retired, active, and inactive participants as of June 30, 2007. We have not audited these data, but have examined them for reasonableness and consistency with the prior year's data. ASRS staff also supplied asset information.

## Actuarial Valuation of The Plan as of June 30, 2007

### Trend Data and Supporting Schedules

ASRS prepared all trend data schedules in the financial section of ASRS's Comprehensive Annual Financial Report (CAFR). ASRS also prepared all supporting schedules in the actuarial section of the CAFR.

We look forward to discussing this report with you at your convenience.

Sincerely,



Charles E. Chittenden, FSA, MAAA, EA  
Principal and Consulting Actuary



Michelle Reding DeLange, FSA, EA, MAAA  
Director, Consulting Actuary

## General Actuarial Information - Plan and HBS

The following charts prepared by the actuary will serve to indicate some of the more important statistics regarding the retirement program; each chart will identify each membership category separately where possible.

As of June 30, 2007

<b>Active Members</b>	State Employees	Teachers	Political Subdivision Employees	Total
Number of members (active)	47,441	72,985	103,575	224,001
Average age	45.5	43.6	45.1	44.7
Average annual salary	\$43,565	\$45,957	\$36,118	\$40,901
Average years of service	9.0	9.7	7.3	8.4

As of June 30, 2007

<b>Retired Members</b>	State Employees	Teachers	Political Subdivision Employees	Total
Number of retirees	20,682	26,083	36,829	83,594
Average age	70.6	68.0	70.1	69.6
Average monthly benefit	\$1,385	\$2,238	\$1,232	\$1,584
Average years of service	18.2	23.7	17.4	19.6

Of all plan retirees at June 30, 2007, 58.4 % received annuities of more than \$1,000 per month. 10.5 % received less than \$300 per month. Of the retirees 15.8 % are less than 60.0 years old, 56.4 % are between 60 and 75 years old, and 27.8% are over 75 years old.

One of the most critical factors bearing on retirement costs is that of changes in the average salary level of active participants. The following chart will show, for five fiscal years, the average salary level for state employees, for teachers, and for political subdivision employees other than teachers, and the average for all groups combined.

	2002-03	2003-04	2004-05	2005-06	2006-07
State employees	\$35,262	\$35,461	\$40,270	\$40,328	\$43,565
Teachers	40,119	40,253	43,348	43,770	45,957
Political subdivision employees	29,181	29,775	32,877	33,211	36,118
All groups	33,998	34,372	37,853	38,185	40,901

## General Actuarial Information - Plan and HBS

### Funding Objective

The funding objective of the Arizona State Retirement System is to maintain reasonable stable contribution rates and to achieve an ultimate funded status of 100%. As of June 30, 2007, the date of the most recent actuarial valuation, this funding level is 82.8%. When the present actuarial asset value of \$26.477 billion is compared to the actuarial liabilities, actuarial liabilities exceed actuarial assets by the amount of \$5.519 billion.

A statutory change effective in 1998 requires that an actuarial valuation be performed only following even-numbered years, rather than annually. This biannual valuation recommends contribution rates for a two-year period. Effective July 1, 2005, additional statutory changes require annual valuations after fiscal year ended June 30, 2007. These rates do not include contributions to the LTD program.

### Normal Costs and Required Contribution Rates

The Plan's normal cost for fiscal year (FY) 2006-2007 is 12.93% and for FY 2005-2006 is 13.41%. The normal cost represents the present value cost, expressed as a percentage of pay, of the current level of benefits provided by the Plan. The Plan has a positive unfunded actuarial accrued liability (an actuarial deficit), which is treated as a debit on the Plan's required contribution rate. Because of the actuarial deficit, the required contribution rate is higher than the normal cost. If the actuarial value of assets and liabilities was equal, the required contribution rate would be the same as the normal cost. Because liabilities exceed assets, the required contribution rate is higher than the normal cost.

Components of the normal cost are as follows:

Retirement benefits	9.69
Health insurance premium supplement	0.57
Survivor benefits	0.33
Withdrawals	1.72
Long-term disability benefit	0.62
Total, normal cost	12.93
Amortization of the UAAL	4.95
Required contribution rate for FY 2008	17.88
Shared by employee and employer	
Required contribution rate for FY 2008	8.94
Shared by employee and employer	Divided by 2
Required matching contribution rate shared by member and employer to the nearest 0.05%	8.95

## **General Actuarial Information - Plan and HBS**

### **Asset Valuation**

The ASRS actuary determines the actuarial value of assets by recognizing investment gains and losses over a period of time. For gains and losses that occurred before fiscal 2002, the period is five years. For gains and losses that occurred in fiscal 2002, or later years, the period is ten years. The gradual recognition of investment gains and losses reduces volatility in the year-to-year level of contribution rates.

### **Long-Term Disability Benefit**

In addition to pension, health insurance, and survivor benefits, the ASRS also offers a long-term disability benefit.

Effective October 1, 1995, to comply with Internal Revenue Code requirements, liabilities associated with the long-term disability benefit were separated from the Plan. No assets were transferred to the LTD fund. Accordingly, the objectives of the funding method that the Board adopted for the LTD program have been:

- ♦ To produce a positive cash flow
- ♦ To maintain reasonably stable contribution rates
- ♦ To build up the assets gradually

The LTD contribution rate for fiscal year 2007 and fiscal year 2006 is 1.00 percent, shared equally by employees and employers.

### **Summary of Actuarial Method for Long-Term Disability Benefit**

The actuarial cost method is changed, effective for the 2005 valuation, to the projected credit method. Assets are valued at market, less (or plus) an adjustment to reflect investment gains (or losses) over a 10-year period. This method applies to gains and losses incurred in fiscal 2006 and later years. The unfunded actuarial accrued liability is amortized over 15 years in level dollar payments.

## Summary of Benefit Provisions - Plan and HBS

The Arizona State Retirement Plan makes provision for the retirement, disability, and death and survivor benefits to all employees of the State, instrumentalities of the State and certain political subdivisions. The major provisions of the Plan may be summarized as follows:

### A. RETIREMENT BENEFITS

The Arizona State Retirement Plan makes provision for the retirement, disability, and death and survivor benefits to all employees of the State, instrumentalities of the State and certain political subdivisions. The major provisions of the Plan may be summarized as follows:

#### A. RETIREMENT BENEFITS

##### 1. Normal Retirement Date (the earliest of the following):

- (a) an employee's sixty-fifth birthday,
- (b) an employee's sixty-second birthday and completion of at least ten years of credited service, or
- (c) the first day immediately following the day that the sum of the employee's age and his years of total credited service equal eighty.

##### 2. Monthly Life Annuity

The product of a benefit multiplier (as determined below) and the participant's best 36 month average compensation (in last 120 months) multiplied by his or her years of total credited service. Members who commenced membership prior to 1984 can use a 60-month average and include additional types of compensation, if doing so produces a larger result.

Years of Credited Service	Benefit Multiplier
Less than 20	2.10%
20.0 to 24.99	2.15%
25.0 to 29.99	2.20%
30 or more	2.30%

Note: Members hired after the effective date of the adoption of the graded multiplier have a maximum benefit equal to 80% of their 36-month final average earnings.

##### 3. Normal Retirement Benefits

The sum of the monthly life annuity and any prior service benefits to which the employee was entitled under the System.

##### 4. Early Retirement

Age 50 with 5 or more years of credited service.

## Summary of Benefit Provisions - Plan and HBS

### 5. Early Retirement Benefits

If not eligible for normal retirement and at least age 50 with 5 years of total credited service, normal retirement benefit earned to the date of retirement, reduced according to the following table:

Provided, however, that if the employee meets the Rule of 77 (but not the Rule of 80), the reduction will be 3% for each unit below 80.

		AGE AT DATE OF RETIREMENT														
Years of Service	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65
5-10	35%	40%	45%	50%	55%	60%	65%	70%	75%	80%	85%	88%	91%	94%	97%	100%
10-19	44%	49%	54%	59%	64%	69%	74%	79%	84%	89%	94%	97%	100%	100%	100%	100%
20+	50%	55%	60%	65%	70%	75%	80%	85%	90%	95%	100%	100%	100%	100%	100%	100%

### 6. Normal Form of Benefit

Straight life annuity payable monthly with benefits commencing on the day following the date of termination of employment.

### 7. Optional Forms:

- (a) joint and contingent annuity (with pop-up) with either 100%, 66-2/3% or 50% of the reduced retirement income payable for the life of the contingent annuitant upon the death of the retiring participant,
- (b) period certain and life annuity (with pop-up) with either five or ten years of payments guaranteed, or
- (c) a social security leveling option combined with any of the other forms of payment.

### 8. Minimum Benefit

The minimum monthly benefit payable to a retired member who is at least age 75 and who has 20 or more years of service is \$600.

## **B. DISABILITY BENEFITS (for disability after June 30, 1988)**

### 1. Long-Term disability

Monthly benefit equal to two-thirds of monthly compensation, reduced by any social security disability or workers' compensation benefits, payable commencing six months after date of disability until the earlier of:

- (a) Date of cessation of total disability, or
- (b) Normal retirement date.

This benefit is paid by a separate LTD plan.

## Summary of Benefit Provisions - Plan and HBS

### 2. Disability Payments if Participant Remains Disabled Through Normal Retirement Date

Monthly benefit participant would have received if service had continued to normal retirement date assuming the participant's salary remained at the level it was at his or her date of disability, also provided that the amount of total credited service is limited to 30 years unless he or she had more than 30 years at date of disability.

3. The minimum monthly benefit payable to a disabled participant is \$50.00.

## C. DISABILITY BENEFITS (for disability before July 1, 1988)

### 1. Eligibility

Age 50 with 5 years of service.

### 2. Benefit Amount

A life annuity that can be provided by the employee's contribution account. Disability payments after normal or early retirement eligibility are reduced by the actuarial value of the disability payments made up to the date of normal or early retirement eligibility.

## D. PRE-RETIREMENT DEATH BENEFITS

### 1. Eligibility

Applicable if death occurs prior to retirement.

### 2. Benefit

Any one of the following, at the option of the beneficiary:

(a) a lump sum equal to the sum of (i) and (ii):

(i) two times participant's contributions to the plan, with interest, and

(ii) the amount of the member's employee and employer accounts, along with supplemental credits, if any, transferred from the System to the Plan, with interest

(b) if (a) is greater than \$5,000, the beneficiary may elect to receive a monthly income for five or ten years certain and life thereafter which is actuarially equivalent to the amount in (a).

### 3. Death of an Active Participant After 15 Years of Credited Service or After Eligibility for Early Retirement

Beneficiary receives a benefit in the form of a survivor annuity equal to the benefit that would have been payable to the beneficiary if the participant had retired on the date of his or her death and elected to receive an annuity payable in the form of joint and 100% survivor with the beneficiary named as the joint pensioner.

## **Summary of Benefit Provisions - Plan and HBS**

### **E. VESTING OF BENEFITS**

1. Vesting

A participant is fully vested in his or her accrued benefit.

2. Benefits Upon Vesting

A fully vested participant is entitled to either:

- (a) the enhanced refund option, or
- (b) the retirement benefit payable at normal retirement earned to the date of participant's termination.

The enhanced refund option allows employees who terminate prior to eligibility for retirement to receive a refund of their employee contributions with interest. In addition, if an employee has at least five years of service, he or she is also entitled to a share of the employer contributions with interest. The share is 25% for employees with five years of service and increases 15% for each additional year of service up to a maximum of 100% for ten or more years of service. The board reduced the interest rate to be credited on refund of contributions from 8% to 4%, effective June 30, 2005.

### **F. RETIREE HEALTH INSURANCE PREMIUM SUPPLEMENT**

1. Eligibility

Retirement or disability after 5 years of credited service and covered by an employer-sponsored group insurance program for which the retired or disabled member must pay part of the cost. Employees who elect the enhanced refund option are not eligible for this benefit.

2. Benefit

The benefit is payable only with respect to allowable health insurance premiums for which the participant is responsible. There is no benefit payable after the retirees die. The maximum benefits for participants with 10 or more years of service are:

- (a) with respect to premiums paid for retirees with member only coverage:
  - \$150 per month if the retiree is under age 65
  - \$100 per month if the retiree is 65 or over
- (b) with respect to premiums paid for retirees with family coverage:
  - \$260 per month if the member and dependents are under age 65

## Summary of Benefit Provisions - Plan and HBS

- \$170 per month if the member and dependents are 65 or over
- \$215 per month if the member is over age 65 and the dependent is under age 65
- \$215 per month if the member is under age 65 and the dependent is over age 65

For employees with five to nine years of service the benefits are the same dollar amounts as above multiplied by a vesting fraction equal to 10 percent for each completed year of service (i.e., 50 percent to 90 percent).

See Section W for a discussion of the temporary benefit payable to retirees in "Rural" coverage areas.

### G. AUTOMATIC COST OF LIVING ADJUSTMENT BASED ON EXCESS INVESTMENT EARNINGS

#### 1. Permanent Benefit Increase (PBI)

Retirees who have been retired one year and LTD members are eligible for a COLA up to a maximum of a 4% increase. The COLA is paid from a reserve of "Excess Investment Earnings." If there are no "Excess Investment Earnings" in reserve then no COLA is paid.

#### 2. Permanent Benefit Increase Enhancement

Provides retired members with at least ten years of service who have been retired five or more years an additional benefit. For each complete 5-year period the member has been retired an incremental benefit is paid if monies to pay the benefit are available. This benefit is funded by an interest credit of 8.0% of the reserve for future PBIs.

PBI and enhanced PBI benefits are reflected in the valuation as soon as they are awarded. Future PBI and enhanced PBI are not included in the valuation.

### H. EMPLOYEE AND EMPLOYER CONTRIBUTIONS

The contribution rate for the fiscal year beginning on July 1st is based on the results of the most recent actuarial valuation as of the last day of the preceding plan year. Member's contribution rate is equal to the required employer contribution rate. The contribution rate for fiscal year 2008 is 9.1% for each member and each employer, based on the 2006 actuarial valuation. The contribution rate for fiscal year 2009 will be 8.95% based on the 2007 valuation.

## Statement of Actuarial Methods and Assumptions Used in Determining Cost - Plan and HBS

(ADOPTED BY BOARD ACTION ON NOVEMBER 21, 2003)

*EFFECTIVE AS OF JUNE 30, 2004*

### A. Actuarial Assumptions

1. Investment Yield Rate                      8% per annum, compounded annually
2. Mortality
  - (a) Pre-retirement                      1994 GAM – Static Table, Projected to 2005 with Projected Scale AA, with no age setback. Rates at representative ages are shown below.

<b>RATES OF MORTALITY (ACTIVE)</b>		
<b>Age</b>	<b>Male Participants</b>	<b>Female Participants</b>
20	0.000411	0.000238
25	0.000592	0.000249
30	0.000758	0.000314
35	0.000805	0.000423
40	0.000981	0.000600
45	0.001366	0.000815
50	0.002112	0.001183
55	0.003583	0.002100
60	0.006679	0.004201
65	0.012447	0.008173
70	0.020095	0.012993

- (b) Post-retirement                      Non Disabled rates are based on the 1994 GAM – Static Table, Projected to 2005 with Projection Scale AA with no age setback. Disabled rates are based on the experience of other large public sector retirement systems and ASRS' own experience. Rates at representative ages are shown below.

## Statement of Actuarial Methods and Assumptions Used in Determining Cost - Plan and HBS

(ADOPTED BY BOARD ACTION ON NOVEMBER 21, 2003)

*EFFECTIVE AS OF JUNE 30, 2004*

### RATES OF MORTALITY

Age	Non-Disabled Disabled		Non-Disabled Disabled	
	Male Participants		Female Participants	
20	0.000411	0.034940	0.000238	0.026939
25	0.000592	0.038887	0.000249	0.027444
30	0.000758	0.051102	0.000314	0.038302
35	0.000805	0.063544	0.000423	0.053927
40	0.000981	0.058807	0.000600	0.056984
45	0.001366	0.040921	0.000815	0.037586
50	0.002112	0.034742	0.001183	0.025696
55	0.003583	0.031356	0.002100	0.022836
60	0.006679	0.031109	0.004201	0.018029
65	0.012447	0.030861	0.008173	0.013934
70	0.020095	0.033730	0.012993	0.012993

### 3. Disability Rates

#### RATES OF DECREMENT DUE TO DISABILITY

Age	Male Participants	Female Participants
20	0.000575	0.000734
25	0.000638	0.000804
30	0.000730	0.001014
35	0.001096	0.001563
40	0.002111	0.002111
45	0.003358	0.003171
50	0.005128	0.004865
55	0.007715	0.007022
60	0.011992	0.010913

4. **Withdrawal Rates**                      Select and ultimate withdrawal rates are uses.  
(for causes other than death,              Rates at representative ages are shown below:  
disability or retirement)

## Statement of Actuarial Methods and Assumptions Used in Determining Cost - Plan and HBS

(ADOPTED BY BOARD ACTION ON NOVEMBER 21, 2003)

*EFFECTIVE AS OF JUNE 30, 2004*

### RATES OF DECREMENT DUE TO WITHDRAWAL

Age	Years of Service										
	0	1	2	3	4	5	6	7	8	9	10+
	<b>Male Employees</b>										
20	0.3731	0.3642	0.2895	0.2545	0.1508	0.1364	0.0910	0.0843	0.0711	0.0763	0.1277
30	0.2267	0.2055	0.1612	0.1547	0.0917	0.0943	0.0714	0.0682	0.0514	0.0514	0.0565
40	0.1931	0.1698	0.1011	0.1015	0.0601	0.0665	0.0551	0.0546	0.0400	0.0383	0.0227
50	0.1892	0.1692	0.0904	0.0820	0.0458	0.0502	0.0466	0.0351	0.0345	0.0319	0.0155
60	0.2219	0.1824	0.0963	0.0848	0.0445	0.0371	0.0339	0.0333	0.0261	0.0246	0.0108
70	0.2604	0.2282	0.1320	0.1229	0.0616	0.0549	0.0369	0.0313	0.0220	0.0204	0.0180
	<b>Female Employees</b>										
20	0.3316	0.3053	0.2640	0.2596	0.2101	0.2077	0.1680	0.1405	0.1380	0.1285	0.2148
30	0.2015	0.1937	0.1652	0.1456	0.1094	0.1089	0.0930	0.0813	0.0811	0.0760	0.0821
40	0.1720	0.1693	0.1174	0.0930	0.0666	0.0661	0.0563	0.0482	0.0461	0.0417	0.0239
50	0.1698	0.1457	0.0927	0.0722	0.0528	0.0522	0.0426	0.0335	0.0287	0.0227	0.0167
60	0.1805	0.1432	0.0939	0.0731	0.0508	0.0466	0.0357	0.0275	0.0237	0.0190	0.0088
70	0.1916	0.1666	0.1199	0.0955	0.0622	0.0508	0.0363	0.0293	0.0311	0.0358	0.0144

#### 5. Salary Scales

A Select and ultimate salary scale made up of a merit component and general salary increase component as follows:

Years of Service	Merit Component	Total Salary Increase*
(1)	(2)	(3)
1	5.00%	9.50%
2	4.00%	8.50%
3	2.50%	7.00%
4	1.80%	6.30%
5	1.40%	5.90%
6	1.25%	5.75%
7	1.00%	5.50%
8	0.80%	5.30%
9	0.75%	5.25%
10	0.50%	5.00%
11 to 19	0.25%	4.75%
20 or more	0.00%	4.50%

\*Total salary increase rate = inflation (or growth) rate (4.25 %) + productivity increase rate (0.25 %) + merit component

## Statement of Actuarial Methods and Assumptions Used in Determining Cost - Plan and HBS

(ADOPTED BY BOARD ACTION ON NOVEMBER 21, 2003)

*EFFECTIVE AS OF JUNE 30, 2004*

6. **Retirement Age** A Select and ultimate retirement rates are used. Rates at representative ages and years of service are shown below:

### RATES OF DECREMENT DUE TO RETIREMENT

#### Years of Service - Male Members

Age	0-4	5-9	10-14	15-19	20-24	25	26-29	30	31+
50	0.000	0.070	0.046	0.051	0.056	0.086	0.078	0.191	0.141
55	0.000	0.056	0.041	0.046	0.071	0.174	0.141	0.186	0.136
60	0.000	0.077	0.081	0.101	0.248	0.278	0.211	0.361	0.311
62	0.000	0.087	0.311	0.351	0.411	0.441	0.411	0.561	0.511
65	0.269	0.139	0.312	0.312	0.312	0.342	0.312	0.362	0.312
70	0.290	0.155	0.318	0.318	0.318	0.348	0.318	0.368	0.318

#### Years of Service - Female Members

Age	0-4	5-9	10-14	15-19	20-24	25	26-29	30	31+
50	0.000	0.072	0.047	0.052	0.057	0.087	0.079	0.192	0.142
55	0.000	0.068	0.043	0.048	0.073	0.175	0.143	0.188	0.138
60	0.000	0.087	0.079	0.099	0.246	0.276	0.209	0.359	0.309
62	0.000	0.097	0.308	0.348	0.408	0.438	0.408	0.558	0.508
65	0.217	0.147	0.309	0.309	0.309	0.339	0.309	0.359	0.309
70	0.222	0.151	0.314	0.314	0.314	0.344	0.314	0.364	0.314

Due to a valuation software change, the retirement rates this year include both retirement and withdrawal rates.

Deferred vested members are assumed to retire at their normal retirement age.

7. Future Retirees Eligible for the Health Insurance Premium Supplement

It is assumed that 75% of future retirees will be eligible to receive the post-retirement health insurance premium supplement and that 60 % of those retirees will be eligible for the dependent premium supplement.

8. Proportion of Vested Termination Members Who Will Not Withdraw Their Contributions

It is assumed that members who terminate with 5 or more years of service (but prior to eligibility for retirement) will choose to receive the enhanced refund option if the value of the enhanced refund option is greater than the present value of the deferred benefit. Otherwise the members are assumed to elect to receive the deferred benefit. If the member is assumed to elect the enhanced refund option, then it is also assumed that the member forfeits the supplement.

Members who terminate with less than five years of service are assumed to withdraw their member contributions with interest.

Members who terminate eligible for early retirement are assumed to commence payments.

9. Spouse Assumptions

We assume that 100% of the members are married. We also assume that the husband is three years older than the wife.

**B. Actuarial Value of Assets**

The actuarial value of assets is equal to the market value of assets less a ten-year phase in (five-year phase-in prior to June 30, 2002) of the Excess (Shortfall) between expected investment return and actual income. There is no corridor around market value within which the actuarial value is required to fall.

**C. Actuarial Funding Method**

Costs are determined under the projected unit-credit method. The unfunded actuarial accrued liability is funded on a level dollar basis over the period of time described in Section 38-737. For the June 30, 2007 actuarial valuation, the period is 30 years.

**D. Data for Valuation**

In preparing the June 30, 2007 actuarial valuation, the actuary has relied on data and assets provided by the staff of the Arizona State Retirement System. While not verifying the data at their source, the actuary has performed tests for consistency and reasonableness.

## Plan and HBS Schedules

### SCHEDULE OF PLAN ACTIVE MEMBER VALUATION DATA

Last 6 Years

Contributing Active Members

Valuation As of June 30	Number	Annual Payroll	Annual Average Pay	Increase in Average Pay
2002	198,970	\$6,989,339,000	\$35,128	5.7%
2003	202,398	7,296,827,756	36,052	2.6
2004	205,482	7,485,590,038	36,429	1.0
2005	212,202	8,032,457,947	37,853	3.9
2006	217,676	8,311,869,615	38,185	0.9
2007	224,001	9,161,803,726	40,901	7.1

### SCHEDULE OF PLAN RETIREES ADDED TO AND REMOVED FROM ROLLS

Last 6 Years

Year Ended	Retirants and Beneficiaries Added to Rolls		Retirants and Beneficiaries Removed from Rolls		Retirants and Beneficiaries Rolls End of Year		% Increase in Annual Allowances*	Average Annual Allowances
	No.	Annual Allowance	No.	Annual Allowance	No.	Annual Allowance		
2002	3,954	\$ N/A	2,528	\$ N/A	60,346	\$ N/A	13.2%	\$16,457
2003	5,955	N/A	1,604	N/A	64,697	N/A	2.2	16,812
2004	6,430	169,063,326	2,196	26,982,679	68,931	1,230,025,859	6.1	17,844
2005	7,005	136,009,712	2,083	29,472,225	73,853	1,336,563,347	1.4	18,098
2006	7,143	170,867,676	2,498	32,717,257	78,498	1,474,713,766	3.8	18,787
2007	7,393	144,536,847	2,297	30,532,270	83,594	1,588,718,343	1.2	19,005

## Plan and HBS Schedules

### SCHEDULE OF UNFUNDED (OVER) ACCRUED LIABILITIES - PLAN

Last 10 Years

Year Ended June 30	Aggregate Accrued Liabilities Plan	Actuarial Value of Net Plan Assets	Assets as a % of Accrued Liabilities Plan	Unfunded (over) Accrued Liabilities Plan (UAL)	Active Member Payroll	UAL as a % of Active Member Payroll
1998	\$13,638,356,506	\$16,168,476,400	119	\$(2,530,119,894)	\$4,968,476,529	(50.9%)
1999	16,121,899,529	18,760,959,854	116	(2,639,060,325)	5,487,933,600	(48.1%)
2000	17,548,523,131	21,126,877,491	120	(3,578,354,360)	5,750,294,662	(62.2%)
2001	20,268,514,444	22,855,143,539	113	(2,586,629,095)	6,356,698,800	(40.7%)
2002	22,586,920,751	23,623,015,969	105	(1,036,095,218)	6,989,339,000	(14.8%)
2003	24,303,639,447	23,516,898,511	97	786,740,936	7,296,827,756	10.8%
2004	25,918,329,505	23,642,904,763	91	2,275,424,742	7,485,590,038	30.4%
2005	27,942,601,285	23,836,519,123	85	4,106,082,162	8,032,457,947	51.1%
2006	29,696,631,262	24,851,522,776	84	4,845,108,486	8,311,869,615	58.3%
2007	31,995,671,426	26,476,687,905	83	5,518,983,521	9,161,803,726	60.2%

## Plan and HBS Schedules

### SOLVENCY TEST

Last 10 Years

Year Ended 30-Jun	Aggregate Accrued Liabilities for			Net Assets Available for Benefits	Portion of Accrued Liabilities Covered by Net Assets Available for Benefits		
	(1) Active Member Contributions	(2) Retirees and Beneficiaries	(3) Active Members (Employer Financed Portion)		(1)	(2)	(3)
1998	\$2,571,206,900	\$5,530,497,100	\$5,536,652,506	\$16,168,476,400	100%	100%	145.7%
1999	2,679,011,640	6,454,089,795	6,988,798,093	18,760,959,854	100%	100%	137.8%
2000	2,758,428,341	8,817,967,086	7,233,553,039	21,126,877,491	100%	100%	132.0%
2001	2,876,445,119	9,589,562,912	7,427,960,808	22,855,143,539	100%	100%	139.8%
2002	3,046,008,125	10,597,364,389	8,943,548,237	23,623,015,969	100%	100%	111.2%
2003	3,110,690,039	11,428,652,014	9,764,297,394	23,516,898,511	100%	100%	91.9%
2004	3,407,611,954	12,421,950,646	10,088,766,905	23,642,904,763	100%	100%	77.4%
2005	3,717,945,957	13,522,905,728	10,701,749,600	23,836,519,123	100%	100%	61.6%
2006	4,168,243,157	14,576,747,255	10,951,640,850	24,851,522,776	100%	100%	55.8%
2007	5,533,036,906	15,789,894,783	10,672,739,737	26,476,687,905	100%	100%	48.3%

## Plan and HBS Schedules

**SCHEDULE OF RECOMMENDED VS. ACTUAL PLAN CONTRIBUTIONS**

Last 10 Years  
(In Thousands)

Year Ended June 30	Active Member Payroll	Employee Contributions	Employer Retirement Contribution Rate - Actual	Actuary Recommended Contribution
1998	\$5,164,000	\$152,376 *	3.05%	3.05%
1999	5,488,000	152,917	2.85%	2.85%
2000	5,750,000	124,931	2.17%	2.17%
2001	6,564,000	133,504	2.00%	2.00%
2002	6,989,000	135,275	2.00%	2.00%
2003	7,297,000	142,356	5.20%	5.20%
2004	7,486,000	377,436	5.20%	5.20%
2005	8,032,000	403,269	5.20%	5.20%
2006	8,312,000	570,581	6.90% **	7.75% **
2007	9,162,000	766,625	8.60% **	7.75% **

\* Excludes contributions of \$884,669 for ASRS System members who contributed 7.49% during 1998.

\*\* The 7.75% rate was determined in the 2004 valuation and would have applied to the 2006/2007 biennium. The Legislature adopted a stair-step approach to increasing contribution rates and set the rate at 6.9% for fiscal 2006 and 8.6% for fiscal 2007.

## Plan and HBS Schedules

### ANALYSIS OF FINANCIAL EXPERIENCE FOR THE PLAN

Last 10 Years

*(In Millions)*

Year Ended June 30	Unfunded Actuarial Liability (UAAL), Prior Year	Normal Cost for the Year	Contributions for the Year	Interest at 8% on UAAL	On Normal Cost	On Contributions	Total	Expected UAAL	Actual UAAL	Gain (Loss) for the Year
1998	(1,783.75)	506.17	(321.35)	(142.70)	40.49	(12.85)	(115.06)	(1,713.98)	(2,530.12)	816.14
1999	(2,530.12)	540.46	(347.97)	(202.41)	43.24	(13.92)	(173.09)	(2,510.72)	(2,639.06)	128.34
2000	(2,639.06)	601.15	(283.77)	(211.12)	48.09	(11.35)	(174.38)	(2,496.06)	(3,578.35)	1,082.29
2001	(3,578.35)	631.66	(367.20)	(286.27)	50.53	(14.69)	(250.42)	(3,564.30)	(2,586.63)	(977.67)
2002	(2,586.63)	746.91	(321.78)	(206.93)	59.75	(12.87)	(160.05)	(2,321.54)	(1,036.10)	(1,285.44)
2003	(1,036.10)	831.73	(375.52)	(82.89)	66.54	(15.02)	(31.37)	(611.26)	786.74	(1,397.97)
2004	786.74	950.78	(865.97)	62.94	76.06	(34.64)	104.36	975.91	2,275.42	(1,299.51)
2005	2,275.42	1,010.22	(946.70)	182.03	80.82	(37.87)	224.98	2,563.94	4,106.08	(1,542.15)
2006	4,106.08	1,075.46	(1,265.19)	328.49	86.04	(50.61)	363.92	4,280.27	4,845.11	(564.84)
2007	4,845.11	1,171.61	(1,631.17)	387.61	93.73	(65.25)	416.09	4,801.64	5,518.98	(717.34)

## Actuarial Certification - LTD



January 10, 2008

Retirement Board  
Arizona State Retirement System  
3300 North Central Avenue  
14<sup>th</sup> Floor  
Phoenix, AZ 85012

**Valuation of the ASRS Long Term Disability Program as of June 30, 2007**

Dear Retirement Board Members:

We certify that the information contained in the attached 2007 actuarial valuation report is accurate and fairly presents the actuarial position of the Arizona State Retirement System Long Term Disability Program (the LTD Program) as of June 30, 2007.

We have made all calculations for this report in conformity with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, the report's results comply with the requirements of the Arizona Constitution and statutes and, where applicable, the Internal Revenue Code, the Employee Retirement Income Security Act of 1974 (ERISA), and the Statements of the Governmental Accounting Standards Board. The undersigned actuaries are independent. They are both Enrolled Actuaries, members of the American Academy of Actuaries and Fellows of the Society of Actuaries. Both are experienced in performing valuations for large public retirement systems and are fully qualified to provide actuarial services to the State of Arizona.

**Actuarial Valuations**

The primary purpose of the valuation report is to determine the required member and employer contribution rates, to describe the current financial condition of the LTD Program, and to analyze changes in the LTD Program's condition. In addition, the report provides information that ASRS requires for its Comprehensive Annual Financial Report and it summarizes census data.

Valuations are performed annually as of June 30 which is the last day of both the LTD Program year and ASRS' fiscal year.

## Actuarial Certification - LTD

Retirement Board  
January 10, 2008  
Page 2

### Funding Objectives

The actuarial valuation calculates the contribution rates payable by members and participating employers. These rates, when applied to payroll, yield contribution amounts sufficient to fund the normal cost plus the amortization of unfunded actuarial accrued liability over a rolling 15-year period. Contribution rates are set annually based on the valuation of the preceding year. The rate calculated in this report (0.50% for each employer and employee) will apply in the fiscal year beginning July 1, 2008. The LTD program is meeting its funding objectives.

### Experience Studies

Most of the assumptions of the LTD program are also assumptions of the ASRS defined benefit plan (the Plan). The actuary performs experience studies for the Plan every five years. Historically, no separate LTD experience studies have been performed. ASRS had an actuarial audit of the LTD program's 2003 valuation. In the future, ASRS intends to perform experience studies for the LTD program on the same five-year cycle that it uses for the Plan. The first such study will cover the period from July 1, 2002 to June 30, 2007 and is expected to be completed in the first quarter of 2008.

### Benefit Provisions

There have been two changes in benefit provisions since the last valuation. The pre-existing condition period was increased from three months to six months for members hired on or after July 1, 2008. Offset percentages for Social Security disability benefits were increased from 64% to 85% and for Social Security retirements from 83% to 85% for members who became disabled on or after July 1, 2008.

The terms of the LTD Program are summarized on pages 13 to 15 of this report. There is no provision for LTD benefits to increase for cost-of-living adjustments.

### Assumptions and Methods

The assumptions are consistent with the Plan and previous LTD Program assumptions.

We have introduced an assumption this year to reflect actual rates of termination of claims that are lower than those expected by the 1987 Commissioners' Group Long-Term Disability Valuation Table. We loaded the accrued liabilities and normal cost by 10% to accommodate the lower actual rates. Our experience study will test this assumption, which is first effective in the valuation as of July 1, 2007.

The actuary originates the assumptions, in consultation with the ASRS Director and other ASRS staff members, and recommends the assumptions to the Board which makes the ultimate decision on which assumptions and methods to use.

## Actuarial Certification - LTD

Retirement Board  
January 10, 2008  
Page 3

The Board elected to use the projected unit credit method. Under this method, actuarial gains (or losses) are subtracted from (or added to) the unfunded actuarial accrued liability.

### Data

ASRS staff and VPA (the administrator of the LTD program) supplied census data for participants as of June 30, 2007. We have not audited these data, but have examined them for reasonableness and consistency with the prior year's data. ASRS staff also supplied asset information.

### Trend Data and Supporting Schedules

ASRS prepared all trend data schedules in the financial section of ASRS' Comprehensive Annual Financial Report (CAFR). ASRS also prepared all supporting schedules in the actuarial section of the CAFR.

We look forward to discussing this report with you at your convenience.

Sincerely,



Charles E. Chittenden, FSA, EA, MAAA



Michelle Reding DeLange, FSA, EA, MAAA

## General Actuarial Information - LTD

Effective October 1, 1995, to comply with Internal Revenue Code requirements, liabilities associated with the long-term disability benefit were separated from the Plan. No assets were transferred to the LTD fund. Accordingly, the objectives of the funding method that the Board adopted for the LTD program have been:

- To produce a positive cash flow
- To maintain reasonably stable contribution rates
- To build up the assets gradually

The following table summarizes the key results of the June 30, 2007, actuarial valuation of the Arizona State Retirement System (ASRS) Long Term Disability (LTD) Program.

<b>(Amounts in 000s)</b>	<b>2006</b>	<b>2007</b>
Normal Cost	\$ 45,907	\$ 47,774
Actuarial Accrued Liability	574,701	604,486
Valuation Assets	194,297	231,685
Funded Status	33.81%	38.33%
Unfunded Actuarial Accrued Liability (UAAL)	380,404	372,800
Past Service Cost	41,151	40,328
Annual Required Contribution (ARC)	87,058	88,102
Payroll	8,311,870	9,161,804
ARC as % of payroll for each employer and each member	0.52%	0.48%
UAAL as % of payroll	4.60%	4.10%

The following chart will serve to indicate some of the more important statistics regarding the long-term disability program.

Number of LTD Open Claim Members	5,071
Average Age	54
Average Monthly Benefit	\$1,091

## Summary of Benefit Provisions - LTD

### Summary of Benefit Provisions

The Arizona State Retirement System (ASRS) Long Term Disability (LTD) Program began on July 1, 1995. The program covers ASRS LTD Program participants who become disabled on or after July 1, 1995. ASRS members who were receiving LTD benefits prior to July 1, 1995, were transferred to the program on October 1, 1995. Contributions began July 1, 1995, and are paid 50% by employers and 50% by active members.

Below we have summarized the main provisions of the LTD Program.

**Effective Date:** The plan was established effective July 1, 1995.

**Participation:** To be eligible, members must be actively at work and engaged to work at least 20 weeks in a fiscal year and at least 20 hours each week. Coverage is contingent on payment of premiums.

**Contributions:** Members are required to contribute to the LTD Program in accordance with the schedule ratified each year by the Board. The current rate is .50% of payroll. Employers have equal contributions, and the Board allocates all contributions to the LTD Program's depository.

**Qualifications for Benefit:** Monthly benefits are not payable until a member has been totally disabled for a period of six consecutive months. Monthly benefits are not payable to a member whose disability is due to the following:

1. an intentionally self-inflicted injury
2. war, whether declared or not
3. an injury incurred while engaged in a felonious criminal act or enterprise
4. an injury or sickness for which the member received medical treatment within six months before the date of the member's coverage under the LTD Program. The restriction does not apply to a member who was employed by a participating employer for twelve continuous months nor does it apply to a member who was employed by an employer as of June 30, 1988.

Monthly benefits are not payable to a member who is receiving retirement benefits from ASRS.

**Totally Disabled:** A member is considered totally disabled if:

1. during the first thirty months of a period of disability, the member is unable to perform all duties of the position held by the member when the member became totally disabled; and
2. for a member who has received monthly benefits for 24 or more total months, that a member is unable to perform any work for compensation or gain for which the member is reasonably qualified by education, training, or experience.

**Benefit Amount:** Benefits payable from the plan equal two-thirds of a member's monthly compensation at the time of disability. Benefits are offset by:

1. 85% of social security disability benefits that the member or the member's dependents are eligible to receive;
2. 85% of social security retirement benefits that the member is eligible to receive;
3. all of any worker's compensation benefits;

## Summary of Benefit Provisions - LTD

4. all of any payments for a veteran's disability if both of the following apply:
  - a) the veteran's disability payment is for the same condition or a condition related to the condition currently causing the member's total disability;
  - b) the veteran's disability is due to service in the armed forces of the United States;
5. all of any other benefits by reason of employment that are financed partly or wholly by an employer, including payments for sick leave; and
6. 50% of any salary, wages, commissions, or similar pay that the member receives or is entitled to receive from any gainful employment in which the member engages.

**Benefit Period:** Monthly benefits cease to be payable to a member at the earliest of the following:

1. the date the member ceases to be totally disabled;
2. the date the member ceases to be under the direct care of a doctor or refuses to undergo any medical examination requested by the company selected by the Board to administer the LTD Program;
3. the date the member withdraws employee contributions with interest and ceases to be a member; and
4. the later of following:
  - a) the member's normal retirement date;
  - b) the month following 60 months of payments if disability occurs before age 65;
  - c) the month following attainment of age 70 if disability occurs at age 65 or after but before age 69;
  - d) the month following twelve-months of payments if disability occurs at or after age 69.

**Expenses:** Expenses associated with the operation of the LTD Program are payable by the LTD Program. The fee schedule is as follows:

Administrative:	\$13,000 / month
New Claims Fee:	\$ 420 / claim
Claims Management:	\$ 29 / claim / year

**Changes in Plan Terms Since the Prior Valuation:** The pre-existing condition period was increased from three months to six months for members hired on or after July 1, 2008. Offset percentages for Social Security disability benefits were increased from 64% to 85% and for Social Security retirements from 83% to 85% for members who became disabled on or after July 1, 2008.

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## Statement of Actuarial Methods and Assumptions Used in Determining Cost - LTD

### Statement of Actuarial Methods and Assumptions

We have prepared this report on our actuarial valuation of the assets and liabilities of the Arizona State Retirement System LTD Program as of June 30, 2007, in accordance with generally accepted actuarial principles, and with the requirements of GASB #43.

The actuarial assumptions and methods on which our valuation has been based are, in our opinion, appropriate for the purpose of our current valuation. The ASRS Board has adopted them in its meetings of April 14, 2006, and November 17, 2006.

We have not audited the data or the asset information used in this valuation, but believe them to be complete and accurate.

### Summary of Actuarial Method

The actuarial cost method is the projected unit credit method. Assets are valued at market, less (or plus) an adjustment to reflect investment gains (or losses) over a 10-year period starting as of June 30, 2006. The unfunded actuarial accrued liability is amortized over 15 years in level dollar payments.

### Summary of Actuarial Assumptions

The majority of the assumptions used in LTD valuation are the same as those used in the valuation of the Plan and are based on the most recent experience study which covers the five year period from July 1, 1997 through June 30, 2002. Those assumptions include the mortality table used for post retirement mortality, the assumed retirement age, the probabilities of withdrawal from active service before age and service retirement, the pay increase assumptions and the extent to which total active member payroll is expected to increase as a result of inflation.

<b>Discount Rate</b>	8% per annum
<b>Rates of Termination of Claims in Payment due to Death or Recovery</b>	1987 Commissioners' Group Long Term Disability Valuation Table (1987 CGDT), applicable to plans with a six-month elimination period.
<b>Disability Incidence Rates for Active Members</b>	Age- and sex-based rates as developed for the Plan. Rates at representative ages are given below:

<u>Age</u>	<u>Males</u>	<u>Females</u>
20	0.06%	0.70%
30	0.07%	0.10%
40	0.21%	0.21%
50	0.51%	0.49%
60	1.20%	1.09%

## Statement of Actuarial Methods and Assumptions Used in Determining Cost - LTD

### Offsets for Disabled Members

We are assuming that the amounts that the administrator reports as offsets (other than overpayment offsets) will continue to apply to each member's benefit until that benefit expires. For members within first three years of receipt of LTD benefits, we have adjusted benefit amounts to reflect future offsets.

We assume that these offsets reduce the gross benefits by 39% since that is the average reduction for current open claims. We also assume that the weighted average months of overpayment is equal to 19 months.

### Offsets for Active Members

We assume that LTD Program benefits, after all applicable offsets, are 59.7% of the benefits before the offsets. This is the percentage that applies for currently disabled members and is based on the actual offsets as of June 30, 2005.

### Administrative Expense Reserve for Active Members

2.8% of projected claim liabilities. This is the percentage that applies for currently disabled members.

### Actual Rates of Termination of Claims

Total liabilities are loaded 10% to reflect the lower actual rates of termination of claims.

### Changes in Assumptions Since the Prior Valuation

The only change for the June 30, 2007 valuation is to add the load for actual rates of termination of claims as described above.

**All other assumptions are the same as those used in the valuation of the Plan.**

## LTD Schedules

### SCHEDULE OF BENEFIT RECIPIENTS ADDED TO AND REMOVED FROM ROLLS LAST 6 YEARS

Valuation As Of June 30	Retirants and Beneficiaries Added to Rols		Retirants and Beneficiaries Removed from Rols		Retirants and Beneficiaries Rols End of Year		% Increase in Annual Allowances	Average Annual Allowances
	No.	Annual Allowance	No.	Annual Allowance	No.	Annual Allowance		
2002	N/A	N/A	N/A	N/A	4,290	55,341,168	N/A	2,900
2003	1,001	13,286,461	730	12,430,021	4,561	56,197,608	1.5%	2,321
2004	865	14,403,292	742	9,301,684	4,684	61,299,216	9.1%	3,087
2005	926	15,285,111	671	11,000,763	4,939	65,583,564	7.0%	3,279
2006	840	16,021,268	761	17,279,900	5,018	64,324,932	-1.9%	2,819
2007	800	15,958,305	747	13,886,858	5,071	66,396,379	3.2%	13,093

### SCHEDULE OF UNFUNDED (OVER) ACCRUED LIABILITIES - LTD LAST 6 YEARS *(in thousands)*

Year Ended June 30	Aggregate Accrued Liabilities Plan	Actuarial Value of Net Plan Assets	Assets as a % of Accrued Liabilities Plan	Unfunded (Over) Accrued Liabilities Plan (UAL)	Active Member Payroll	UAL as a % of Active Member Payroll
2004	\$544,205	\$137,861	25.3%	\$406,344	\$7,458,590	5.4%
2005	577,405	164,834	28.5%	412,572	8,032,458	5.1%
2006	574,701	194,297	33.8%	380,404	8,311,870	4.6%
2007	604,486	231,685	38.3%	372,800	9,161,804	4.1%

Information prior to 2004 is not available.

## LTD Schedules

### SOLVENCY TEST

Last 6 Years

Year Ended June 30	Aggregate Accrued Liabilities for				Portion of Accrued Liabilities Covered by Net Assets Available for Benefits		
	(1) Active Member Contributions	(2) Retirees and Beneficiaries	(3) Active Members (Employer Financed Portion)	Net Assets Available for Benefits	(1)	(2)	(3)
2002	-	\$208,806,380	\$22,398,485	\$116,808,750	100%	56%	0%
2003	-	222,703,620	26,415,435	110,201,395	100%	49%	0%
2004	-	243,713,353	300,491,725*	137,861,118	100%	57%	0%
2005	-	258,735,220	318,670,078	164,833,736	100%	64%	0%
2006	-	247,576,703	327,124,018	194,296,619	100%	78%	0%
2007	-	274,946,786	329,538,761	231,685,240	100%	84%	0%

\* The 2004 valuation results are from a study of the effects of adopting GASB #43. The formal valuation report did not use the GASB methodology.

### SCHEDULE OF RECOMMENDED VS. ACTUAL LTD CONTRIBUTIONS

LAST 10 YEARS

(in Thousands)

Year Ended June 30	Active Member Payroll	Employee Contributions	Employer Retirement Contribution Rate Actual	Actuary Recommended Contribution
1998	\$5,164,000	\$25,820	0.50%	0.50%
1999	5,488,000	27,440	0.50%	0.50%
2000	5,750,000	28,750	0.50%	0.50%
2001	6,564,000	32,820	0.50%	0.50%
2002	6,989,000	34,945	0.50%	0.50%
2003	7,297,000	36,485	0.50%	0.50%
2004	7,486,000	37,430	0.50%	0.50%
2005	8,032,000	40,160	0.50%	0.50%
2006	8,312,000	41,560	0.50%	0.50%
2007	9,162,000	45,810	0.50%	0.50%

## LTD Schedules

### ANALYSIS OF FINANCIAL EXPERIENCE FOR LTD

#### 1. Change in Open Claims Reserves

The increase in the reserves for payments not yet due on disabled lives may be summarized as follows:

	Lives	Reserves
(a) Open Claims Reserve liability on July 1, 2006	5,018	\$241,283,260
(b) Change in reserve on 4,271 continuing disabled lives	N/A	(7,467,796)
(c) Reserves released on terminated lives	(747)	(22,436,070)
(d) Reserves added on new lives	800	56,236,619
(e) Open Claims Reserve liability on June 30, 2007 = (a) + (b) + (c) + (d)	5,071	267,616,013

#### 2. Development of Liability (Gain)/Loss

(a) Actuarial Accrued Liability as of July 1, 2006	\$574,700,721	
(b) Normal Cost for 2006/2007	45,907,451	
(c) Expected Benefit Payment for 2006/2007	68,317,000	
(d) Expected Actuarial Accrued Liability on June 30, 2007 = ( (a)+(b) ) x 1.08 – (c) x (1 + .08 x 13/24)	598,979,423	
(e) Change in Plan Terms	(52,203,778)	
(f) Change in Assumptions	54,286,797	
(g) Liability (Gain)/Loss	3,423,105	
(h) Actual Actuarial Accrued Liability on June 30, 2007 = (d) + (e) + (f) + (g)	604,485,547	

#### 3. Development of Actuarial Value of Assets

(a) Excess (Shortfall) of Investment Income:		
(i) Current Year		\$11,421,699
(ii) Current Year -1		1,895,241
(b) Deferral of Excess (Shortfall):		
(i) Current Year (90% Deferral)		10,279,529
(ii) Current Year -1 (80% Deferral)		1,516,193
(ii) Total Deferred for Year		11,795,722
(c) Market Value of Assets as of June 30, 2007		243,480,962
(d) Actuarial Value of Assets as of June 30, 2007 = (c) - (b)(ii)		231,685,240

#### 4. Development of Asset (Gain)/Loss

## LTD Schedules

(a)	Actuarial Value of Assets as of July 1, 2006	\$194,296,619
(b)	Contributions	89,036,990
(c)	Actual Benefit Payments for 2005	69,222,105
(d)	Expected Investment Income at 8% Return	16,105,585
(e)	Expected Actuarial Assets as of June 30, 2007 = (a) + (b) - (c) + (d)	230,217,089
(f)	Gain/(Loss) on Actuarial Assets	1,468,151
(g)	Actuarial Assets as of June 30, 2007 = (f) + (g)	231,685,240

The asset gain is due to investment earnings on actuarial assets in excess of expected.

The actual net return on actuarial assets was 8.73%, compared to the assumption of 8%.

### 5. Analysis of Incurred But Not Open (IBNO) Reserves

(a)	IBNO Reserves as at 7/1/2006	\$27,799,532
(b)	Reserve for Newly Opened Claims as of 7/1/2007 with Disability Date between 1/1/2006 and 7/1/2006	22,250,547
(c)	Reserve for Newly Open Claims as of 7/1/2007 with Disability Date prior to 1/1/2006	9,144,767
(d)	(Gain)/Loss = (b) + (c) - (a)	3,595,782

### 6. Analysis of VPA Offsets

<u>Description of Offset from VPA</u>	<u>Amount of Monthly Offsets</u>	<u>Number With Offsets</u>
Social Security Disability	\$2,216,618	\$3,643
Social Security Retirement	117,068	155
Other	509,403	1,072
Total	<u>\$2,843,089</u>	<u>\$4,870</u>

## Summary of Legislative Plan Changes

The assumptions unique to the LTD valuation were as follows:

### **A.    LEGISLATED PLAN CHANGES ENACTED BY THE 1989 LEGISLATURE OF THE STATE OF ARIZONA**

#### **1. Projected Unit Credit (PUC) Funding Method**

Beginning with the June 30, 1989 actuarial valuation, the total employee and employer contributions payable beginning July 1, 1990 shall be determined using the Projected Unit-Credit (PUC) funding method.

#### **2. \$12,000 Minimum Average Compensation for Current Retirees**

Recalculation of the retirement benefit for all plan members retired before June 30, 1989 who had 10 years of credited service using a minimum average compensation of one thousand dollars per month.

#### **3. 2.0% Ad Hoc COLAs**

- Effective July 1, 1989, all members retired on or before June 30, 1988 shall receive a 2.0% permanent benefit increase to their December 31, 1988 base benefit.
- Effective July 1, 1990, all members retired on or before June 30, 1989 shall receive a 2.0% permanent benefit increase to their June 30, 1990 base benefit.

#### **4. Early Retirement Window**

During the period of May 15, 1989 through November 14, 1989 a member who is eligible for either Normal Retirement or Early Retirement with age plus credited service at least equal to 80, may retire and receive a benefit calculated using a 2.2% multiplier instead of the 2.0% multiplier in effect at that time.

#### **5. 3.0% Tax Equity Allowance**

Retroactive to the later of January 1, 1989 or the date payments commence, each member retiring on or before September 14, 1989 shall receive a tax equity benefit allowance consisting of a permanent increase of 3.0% in his or her January 1, 1989 base benefit.

### **B.    LEGISLATED PLAN CHANGES ENACTED BY THE 1990 LEGISLATURE OF THE STATE OF ARIZONA**

#### **1. Rule of 82**

Effective May 1, 1990, the number of points (sum of member's age and years of service) required to be eligible for normal retirement shall be reduced from 85 to 82. Also, the early retirement reduction factor for employees with 77 or more points but less than 82 points shall be 3% for each point or

## Summary of Legislative Plan Changes

fraction thereof less than 82.

### **2. 3.0% Tax Equity Allowance**

Each member who retires between September 15, 1989 and September 14, 1990 shall receive a tax equity benefit allowance consisting of a permanent increase of 3.0% in his or her base benefit, retroactive to the date of retirement.

### **3. Graded Vesting for Health Insurance Premium Supplement**

The Health Insurance Premium Supplement is extended to those qualifying members with between five and nine years of service. The member will be eligible to receive 10% of the benefit for each completed year of service (i.e., 50% to 90%).

## **C. LEGISLATED PLAN CHANGES ENACTED BY THE 1991 LEGISLATURE OF THE STATE OF ARIZONA**

### **1. 3.0% Tax Equity Allowance**

Each member who retires between September 15, 1990 and September 14, 1991 shall receive a tax equity benefit allowance consisting of a permanent increase of 3.0% in his or her base benefit, retroactive to the date of retirement.

### **2. Recalculation of Retiree Benefits Using 2.0% Benefit Multiplier**

Each retired member with at least 10 years of service who retired prior to June 30, 1985 shall have his or her benefit recomputed. The recomputed benefit shall be equal to 2% times final average earnings times credited service plus an additional \$2 for each year of service. The retired member will receive the larger of the recalculated benefit or his/her current benefit. This increase is effective October 1, 1991.

### **3. 2.3% Ad Hoc Increase**

Effective July 1, 1991 all members retired on or before June 30, 1990 shall receive a 2.3% permanent benefit increase in their June 30, 1991 base benefit.

### **4. Rule of 80**

Effective July 1, 1992, the number of points (sum of member's age and years of service) required to be eligible for normal retirement shall be reduced from 82 to 80. (For continuation purposes this legislation is not reflected until the 1993/94 fiscal year).

### **5. Pop-up Option**

A pop-up option is added for retiring members who first participate in the Plan on or after December 31, 1991.

## **Summary of Legislative Plan Changes**

### **D. LEGISLATED PLAN CHANGES ENACTED BY THE 1992 LEGISLATURE OF THE STATE OF ARIZONA**

#### **1. 3.0% Tax Equity Allowance**

Each member who retires between September 15, 1991 and September 14, 1992 shall receive a tax equity benefit allowance consisting of a permanent increase of 3.0% in his or her base benefit, retroactive to the date of retirement.

#### **2. Minimum Retiree Benefit**

Each retiree of the Arizona State Retirement Plan who is at least age 75 on December 31, 1992 and who had at least ten years of service upon retirement from the plan ten years of service upon retirement from the plan shall be eligible for a minimum benefit. If the eligible retiree had at least ten years of service but less than fifteen years, his minimum benefit is \$350 a month. If the eligible retiree had at least fifteen years of service but less than twenty, his minimum benefit is \$500. If the eligible retiree had at least twenty years of service his minimum benefit is \$600. The minimum benefit shall be compared to the retiree's current benefit (including all ad hoc increases).

#### **3. 5% Ad Hoc Increase**

Effective November 1, 1992 all members retired on or before October 31, 1992 shall receive a 5% permanent benefit increase in their October 31, 1992 benefit.

#### **4. Forfeited Service Repurchase**

Any present active member who has previously forfeited service has until December 31, 1994 to repurchase the forfeited service by paying the Plan the employee and employer contributions (accumulated with interest) which would have been contributed during the member's period of forfeited service.

#### **5. Repurchase of Service Due to Reduction in Force**

Any present active member who was terminated prior to December 31, 1992 as a result of a required reduction in force may purchase the credited service for the following period of unemployment if the member had five or more years of service at the time of termination and resumed employment with a participating employer within two years of termination. The cost of the repurchase is the total of the employee and employer contribution (accumulated with interest) which would have been contributed during the member's period of unemployment.

#### **6. Change in Section 38-781.05 Funding Method**

Section 38-781.05 of the plan was amended so that the funding period for the Plan would continue to be the period between valuation and June 30, 2003 as long as the Plan has a negative Unfunded Actuarial Accrued Liability. If the Plan were to have a positive UAAL, then the old funding mechanism would apply.

## Summary of Legislative Plan Changes

### **E. LEGISLATED PLAN CHANGES ENACTED BY THE 1993 LEGISLATURE OF THE STATE OF ARIZONA**

#### **1. No benefit changes were passed by the 1993 Legislature.**

However, the Legislature passed legislation to reduce the required contribution rate of 4.09% down to 3.14%.

### **F. LEGISLATED PLAN CHANGES ENACTED BY THE 1994 LEGISLATURE OF THE STATE OF ARIZONA**

#### **1. Minimum LTD Benefit**

Each member on long term disability will receive a minimum monthly benefit of \$50.

#### **2. Minimum Retiree Benefit**

Each retiree of the Arizona State Retirement Plan who is at least age 75 and who had 20 or more years of service at retirement will receive a minimum monthly benefit of \$600.

#### **3. Pop-up Benefit**

Members who retired prior to January 1, 1992 and who elected a Joint and Survivor option shall receive a "Pop-up" in their retirement income if their beneficiary pre-deceases them.

#### **4. Excess Investment Earnings COLA**

Retirees at least age 55 who have been retired at least one year and members on long-term disability are eligible to receive a cost-of-living adjustment equal to one-half the increase in CPI for the prior calendar year. The COLA will be paid from a reserve of Excess Investment Earnings. If there are no Excess Investment Earnings in reserve, no COLA will be granted.

#### **5. Change in Section 38-737 Funding Period**

Section 38-737 was amended to change the funding period of the Plan to a rolling 30-year period. The change is to be phased-in over the next nineteen years. If the Plan ceases to have a surplus, the funding period would immediately go to 30-years.

## **Summary of Legislative Plan Changes**

### **G.    LEGISLATED PLAN CHANGES ENACTED BY THE 1995 LEGISLATURE OF THE STATE OF ARIZONA**

#### **1. Change in Maximum Increase Provided by Excess Investment Earnings COLA**

The maximum COLA payable from Excess Investment Earnings was increased from 50% to 100% of the increase in the CPI.

#### **2. Removal of LTD Benefit from the Plan**

The Legislature established a new LTD program and removed the LTD benefit from the Plan. Liabilities for current LTD recipients will be transferred to the new LTD program effective October 1, 1995.

#### **3. Creation of Separate Account for the Health Premium Supplement**

The Health Premium Supplement benefit is to be separated into a 401(h) account. The assets and liabilities associated with the Health Premium Supplement will be accounted for separately.

### **H.    LEGISLATED PLAN CHANGES ENACTED BY THE 1996 LEGISLATURE OF THE STATE OF ARIZONA**

#### **1. No material changes.**

### **I.    LEGISLATED PLAN CHANGES ENACTED BY THE 1997 LEGISLATURE OF THE STATE OF ARIZONA**

#### **1. Creation of family Health Supplement.**

Allows unused portion of the Health Supplement of a member or dependent to be used to pay the other recipient's health insurance premium.

#### **2. The calculation methodology for the Excess Investment Earnings COLA was modified.**

#### **3. The contribution rate will be determined on a biennial cycle beginning with the 2000 fiscal year.**

### **J.    LEGISLATED PLAN CHANGES ENACTED BY THE 1998 LEGISLATURE OF THE STATE OF ARIZONA**

#### **1. No material changes.**

## Summary of Legislative Plan Changes

### **K. LEGISLATED PLAN CHANGES ENACTED BY THE 1999 LEGISLATURE OF THE STATE OF ARIZONA**

#### **1. Enhanced Refund Option**

Employees who terminate prior to eligibility for retirement may elect to receive a refund of their employee contributions with interest. If the employee has at least five years of service, the employee is also entitled to a share of the employer contributions with interest. The share is 50% with five years of service and increases 10% for each additional year of service to a maximum of 100% for ten or more years of service.

#### **2. Benefit Multiplier Increased to 2.1%**

The benefit multiplier increased from 2.0% to 2.1% effective July 1, 2000.

#### **3. 5% Ad Hoc Increase**

A 5% retiree ad hoc increase for retirees and beneficiaries effective July 1, 2000.

#### **4. Increase in Maximum Service While on LTD**

Increase in the maximum amount of service that may be accrued while on LTD from 25 to 30.

#### **5. Changes in Permanent Benefit Increase COLA**

- a. The maximum aggregate COLA was increased from 3% to 4%.
- b. The threshold for determining "Excess Earnings" was lowered from 9% to 8%.
- c. The limitation of the COLA to the increase in the CPI was removed.

### **L. LEGISLATED PLAN CHANGES ENACTED BY THE 2000 LEGISLATURE OF THE STATE OF ARIZONA**

#### **1. The age restriction on the Permanent Benefit Increase was eliminated.**

## Summary of Legislative Plan Changes

### **M. LEGISLATED PLAN CHANGES ENACTED BY THE 2001 LEGISLATURE OF THE STATE OF ARIZONA**

#### **1. Health Insurance Premium Benefit Increase**

Increases the health insurance premium benefit for eligible members as follows:

- Benefit for Medicare eligible member with member only coverage increased from \$65 to \$100
- Benefit for non-Medicare eligible member with member only coverage increased from \$95 to \$150
- Benefit for family coverage where member and dependent are non-Medicare eligible increased from \$175 to \$260
- Benefit for family coverage where member and dependent are Medicare eligible increased from \$115 to \$170
- Benefit for family coverage where member is Medicare eligible and dependent is non-Medicare eligible increased from \$145 to \$215
- Benefit for family coverage where member is non-Medicare eligible and dependent is Medicare eligible increased from \$145 to \$215

#### **2. Graded Multiplier**

Provides a graded multiplier in the retirement benefit formula, increasing with years of service according to the following:

- 0.00 to 19.99 Years of Service      2.10%
- 20.00 to 24.99 Years of Service      2.15%
- 25.00 to 29.99 Years of Service      2.20%
- 30.00 or More Years of Service      2.30%

#### **3. Employer Option Service Purchase Incentive**

Permits an employer to offer a member who is eligible to retire under the Rule of 80 a contract to work an additional three years of employment. No contributions are made to ASRS during the contract. If the employee completes the contract, then they receive an additional three years of service with the option to purchase three more years of service.

#### **4. Permanent Benefit Increase Enhancement**

Provides that interest at a rate of 8% be credited on the funds held in reserve for the permanent benefit increase (PBI). This interest will then be used to fund an additional increase for retirees who

## Summary of Legislative Plan Changes

have at least 10 years of service and who have been retired at least five years. The increase is incremental for each five years of retirement.

### 5. Temporary Rural Health Insurance Premium Benefit

In addition to the premium benefit paid to ASRS retired and disabled members, the Legislature granted a temporary benefit for retired and disabled members who live in areas of the state not served by a managed care program (HMO) and who have 10 years of credited service in the following amounts:

- Benefit for Medicare eligible member with member only coverage of \$170 per month
- Benefit for non-Medicare eligible member with member only coverage of \$300 per month
- Benefit for Medicare eligible members with Medicare eligible dependent with family coverage of \$350 per month
- Benefit for non-Medicare eligible members with non-Medicare eligible dependent with family coverage of \$600 per month
- Benefit for Medicare eligible members with non-Medicare eligible dependent with family coverage of \$470 per month
- Benefit for non-Medicare eligible members with Medicare eligible dependent with family coverage of \$470 per month

### 6. Partial Lump Sum Option

Allows a retiring member to receive a portion of his benefit in a lump sum payment. The lump sum is limited to a maximum of 36 monthly payments. The member's monthly annuity is actuarially reduced to reflect the lump sum payment.

### 7. Maximum Benefit

Members who are hired after the date the graded multiplier became law have a maximum benefit equal to 80% of the member's 36-month final average earnings.

## N. LEGISLATED PLAN CHANGES ENACTED BY THE 2002 LEGISLATURE OF THE STATE OF ARIZONA

## Summary of Legislative Plan Changes

1. No material changes.

**O.    LEGISLATED PLAN CHANGES ENACTED BY THE 2003 LEGISLATURE OF THE STATE OF ARIZONA**

**1. Additional Temporary Health Insurance Premium Benefit (Rural Subsidy)**

The Legislature extended the additional temporary Rural Health Insurance Subsidy for two years, beginning July 1, 2003 and ending June 30, 2005. The full benefit is provided to retired and disabled members who live in areas of the state not served by a Health Maintenance Organization (HMO) and who have 10 years of credited service. The Rural Health Insurance Subsidy now requires “mini-

Rural Health Insurance Subsidy	Insurance Coverage Without Medicare Parts A & B		Insurance Coverage With Medicare Parts A & B*	
July 1, 2003 – June 30, 2005	Single	Family	Single	Family
Required Minimum Out-of-Pocket Payment	\$125	\$425	\$100	\$200
Rural Health Insurance Subsidy (Maximums)	Up to \$300	Up to \$600	Up to \$170	Up to \$350

“mini- out of pocket” payments ranging from \$100 to \$425 per month, depending on the plan and coverage selected.

\* Combination plans that include Medicare eligible and non-Medicare eligible retiree and dependent coverage require a \$400 monthly out of pocket payment.

**P.    LEGISLATED PLAN CHANGES ENACTED BY THE 2004 LEGISLATURE OF THE STATE OF ARIZONA**

**1. Service Purchase Program**

The Arizona Legislature revised the method of calculating the cost of service purchases, so that future purchased would be made at true actuarial present value.

**2. Early Retirement Incentive Programs**

The Arizona Legislature provided that employers that participate in ASRS and offer early retirement

## Summary of Legislative Plan Changes

incentives to their employees must notify the ASRS of the incentives. ASRS will determine the cost of the incentives and the employers will pay the cost.

### 3. Long-Term Disability Program

The Arizona Legislature revised and clarified LTD provisions so that disabled members will be required to participate in rehabilitation programs and to pursue Social Security Disability benefits. In addition, the legislation limited the receipt of disability benefits on the basis of a member's "own occupation" to 24 months, rather than to 24 consecutive months.

## Q. LEGISLATED PLAN CHANGES ENACTED BY THE 2005 LEGISLATURE OF THE STATE OF ARIZONA

### 1. Temporary Rural Health Insurance Premium Benefit

The Legislature extended the temporary Rural Health Insurance Subsidy for the next two years, from July 1, 2005 to June 30, 2007. The benefit is provided to Medicare-eligible retirees and disabled members who live in Arizona counties with no Health Maintenance Organization (HMO) service area and who have 10 years of credited service.

### 2. Contribution Rates

The Legislature pegged the contribution rates for fiscal 2006 and 2007 at 6.90% and 8.60%, respectively. After fiscal 2007, contribution rates are to be determined annually.

## R. LEGISLATED PLAN CHANGES ENACTED BY THE 2006 LEGISLATURE OF THE STATE OF ARIZONA

### 1. Elections After Retirement

Legislature limited the ability of ASRS retirees to rescind their elections after retirement. Specifically, members who have chosen a form with a death benefit can "pop up" once to the single life form, but are then not allowed to "pop down" to a death benefit form. ASRS will implement this provision upon receipt of a private letter ruling from the Internal Revenue Service.

### 2. Conformance with Certain Federal Regulations

State statutes were modified to conform to federal regulations regarding military service purchases, optional forms of retirement benefits, and minimum required distributions.

### 3. Repeal of Deferred Retirement Option Plan

## **Summary of Legislative Plan Changes**

The Legislature repealed the modified Deferred Retirement Option Plan (DROP).

### **S.    LEGISLATED PLAN CHANGES ENACTED BY THE 2007 LEGISLATURE OF THE STATE OF ARIZONA**

#### **1. Social Security Offsets and Pre-Existing Condition Period**

Offset percentages for Social Security disability benefits were increased from 64% to 85% and for Social Security retirement benefits from 83% to 85% for members who become disabled on or after July 1, 2008. The pre-existing condition period is increased from three months to six months for members hired on or after July 1, 2008. ASRS is required to recover overpayments by reducing future benefits to a member, beneficiary, or alternate payee.

#### **2. Temporary Rural Health Insurance Premium Benefit**

The Legislature extended the temporary Rural Health Insurance Subsidy for two years from July 1, 2007 to June 30, 2009. The benefit is provided to Medicare-eligible retirees and disabled members who live in Apache, Gila, Mohave, or Navajo counties if they have ten years of credited service.

#### **3. Exemption of Post-Doctoral Scholars**

Effective September 19, 2007, post-doctoral scholars are exempted from ASRS membership.

#### **4. Expanded Eligibility for Active Military Service Credit**

Effective July 1, 2007, the term “presidential” call-up is changed to “military” call-up. It applies death and disability benefits to those that occur during active military service rather than just to those that are a result of active service. The law allows a member who becomes disabled during or as a result of active service to receive service credit (paid by the employer) from the date active service began through one year after the member’s date of disability if the member cannot return to work. The disability provision expires June 30, 2009.



**Arizona State Retirement System**  
A Component Unit of the State of Arizona



# 2008

**Statistical  
Section**



## Table of Contents

### V. Statistical Section

This part of the Arizona State Retirement System’s (ASRS’s) comprehensive annual financial report presents detailed information as a context for understanding what the information in the financial statements, note disclosures, and required summary information says about the ASRS’s overall financial health.

#### Financial Trends

These schedules contain trend information to help the reader understand how the ASRS’s financial performance has changed over time.

1.) Net Assets . . . . .	134
<i>Last 10 Fiscal Years</i>	
2.) Changes in Net Assets . . . . .	135
<i>Last 10 Fiscal Years</i>	
3.) Benefits Paid . . . . .	137
<i>Last 10 Fiscal Years</i>	

#### Revenues

These schedules contain information to help the reader understand the ASRS’s funding over time.

1.) Contributions Received . . . . .	138
<i>Last 10 Fiscal Years</i>	
2.) Actual Contribution Rates . . . . .	139
<i>Last 10 Fiscal Years</i>	

#### Operations

These schedules provide contextual information about the ASRS’s operations.

1.) Members by Type of Benefit . . . . .	140
<i>As of June 30, 2008</i>	
2.) Average Benefit Payments . . . . .	141
<i>Last 10 Fiscal Years</i>	
3.) Principal Participating Employers . . . . .	143
<i>Current Year and Nine Years Ago</i>	

## Financial Trends: Net Assets - Last 10 Fiscal Years

RETIREMENT NET ASSETS (in thousands)	FISCAL YEAR									
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>ASSETS</b>										
Cash, Receivables, and Prepaids	\$257,569	\$317,058	\$290,502	\$307,934	\$414,382	\$2,139,601	\$2,091,244	\$2,396,175	\$2,197,053	\$2,095,722
Investments at Fair Value	22,805,992	24,340,442	22,267,217	20,120,799	20,659,916	23,291,652	24,154,827	25,699,691	30,978,445	29,021,366
Total Assets	23,063,561	24,657,500	22,557,719	20,428,733	21,074,298	25,431,253	26,246,071	28,095,866	33,175,498	31,117,088
<b>Liabilities</b>										
Investments Payable	1,512,590	1,714,961	1,753,889	2,081,206	3,149,294	4,938,242	4,654,687	4,853,112	6,078,211	6,368,470
Other Payables	955	475	5,503	569	3,423	7,822	20,470	23,108	27,729	31,431
Total Liabilities	1,513,545	1,715,436	1,759,392	2,081,775	3,152,717	4,946,064	4,675,157	4,876,220	6,105,940	6,399,901
<b>Total Net Assets</b>	<b>\$21,550,016</b>	<b>\$22,942,064</b>	<b>\$20,798,327</b>	<b>\$18,346,958</b>	<b>\$17,921,581</b>	<b>\$20,485,189</b>	<b>\$21,570,914</b>	<b>\$23,219,646</b>	<b>\$27,069,558</b>	<b>\$24,717,187</b>

HBS NET ASSETS (in thousands)	FISCAL YEAR									
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>ASSETS</b>										
Cash, Receivables, and Prepaids	\$11,112	\$9,959	\$10,597	\$12,276	\$15,451	\$85,226	\$85,061	\$96,084	\$90,106	\$94,213
Investments at Fair Value	853,254	953,418	899,282	843,856	805,430	917,308	974,406	1,081,538	1,335,221	1,273,867
Total Assets	864,366	963,377	909,879	856,132	820,881	1,002,534	1,059,467	1,177,622	1,425,327	1,368,080
<b>Liabilities</b>										
Investments Payable	56,591	67,496	70,833	87,285	122,775	194,486	187,770	204,237	261,980	279,619
Other Payables	16	19	14	-	-	-	60	3,639	394	475
Total Liabilities	56,607	67,515	70,847	87,285	122,775	194,486	187,830	207,876	262,374	280,094
<b>Total Net Assets</b>	<b>\$807,759</b>	<b>\$895,862</b>	<b>\$839,032</b>	<b>\$768,847</b>	<b>\$698,106</b>	<b>\$808,048</b>	<b>\$871,637</b>	<b>\$969,746</b>	<b>\$1,162,953</b>	<b>\$1,087,986</b>

LTD NET ASSETS (in thousands)	FISCAL YEAR									
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>ASSETS</b>										
Cash, Receivables, and Prepaids	\$1,424	\$4,645	\$13,214	\$5,184	\$4,145	\$7,641	\$14,040	\$15,241	\$10,565	\$12,331
Investments at Fair Value	71,344	93,409	80,143	90,048	108,364	130,428	151,025	180,983	233,148	233,062
Total Assets	72,768	98,054	93,357	95,232	112,509	138,069	165,065	196,224	243,713	245,393
<b>Liabilities</b>										
Investments Payable	-	-	-	-	-	-	-	-	-	-
Other Payables	3,461	10,374	174	1,228	2,308	207	231	222	227	222
Total Liabilities	3,461	10,374	174	1,228	2,308	207	231	222	227	222
<b>Total Net Assets</b>	<b>\$69,307</b>	<b>\$87,680</b>	<b>\$93,183</b>	<b>\$94,004</b>	<b>\$110,201</b>	<b>\$137,862</b>	<b>\$164,834</b>	<b>\$196,002</b>	<b>\$243,486</b>	<b>\$245,171</b>

## Financial Trends: Changes in Net Assets - Last 10 Fiscal Years

RETIREMENT CHANGES IN NET ASSETS (in thousands)										
ADDITIONS	FISCAL YEAR									
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Member Contributions	\$152,917	\$124,931	\$133,504	\$135,275	\$142,356	\$377,436	\$403,661	\$570,933	\$766,962	\$857,813
Employer Contributions	86,707	72,256	77,196	131,234	138,100	297,770	318,311	477,472	663,544	759,482
Member Reimbursements/Transfers	46,171	35,348	39,535	50,832	93,552	113,944	141,932	125,751	107,548	95,226
Net Investment Income	2,753,117	1,956,673	(1,449,643)	(1,762,370)	354,735	3,096,779	1,720,991	2,126,272	4,105,644	(1,963,259)
Total Additions	3,038,912	2,189,208	(1,199,408)	(1,445,029)	728,743	3,885,929	2,584,895	3,300,428	5,643,698	(250,738)
<b>DEDUCTIONS</b>										
Retirement Benefits	627,612	695,426	809,133	924,172	1,067,481	1,238,966	1,406,547	1,538,992	1,650,818	1,768,219
Survivor Benefits	11,485	13,256	14,134	14,078	15,861	14,859	18,402	17,125	21,590	22,648
Refunds/Transfers	27,117	75,637	108,692	51,382	43,433	38,548	48,745	65,442	88,027	281,563
Administration and Other	12,222	12,841	12,370	16,708	27,345	29,948	25,476	30,137	33,351	29,203
Total Deductions	678,436	797,160	944,329	1,006,340	1,154,120	1,322,321	1,499,170	1,651,696	1,793,786	2,101,633
<b>NET CHANGE</b>	<b>2,360,476</b>	<b>1,392,048</b>	<b>(2,143,737)</b>	<b>(2,451,369)</b>	<b>(425,377)</b>	<b>2,563,608</b>	<b>1,085,725</b>	<b>1,648,732</b>	<b>3,849,912</b>	<b>(2,352,371)</b>
Net assets beginning of year	19,189,540	21,550,016	22,942,064	20,798,327	18,346,958	17,921,581	20,485,189	21,570,914	23,219,646	27,069,558
<b>NET ASSETS END OF YEAR</b>	<b>\$21,550,016</b>	<b>\$22,942,064</b>	<b>\$20,798,327</b>	<b>\$18,346,958</b>	<b>\$17,921,581</b>	<b>\$20,485,189</b>	<b>\$21,570,914</b>	<b>\$23,219,646</b>	<b>\$27,069,558</b>	<b>\$24,717,187</b>

HBS CHANGES IN NET ASSETS (in thousands)										
ADDITIONS	FISCAL YEAR									
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Employer Contributions	\$66,209	\$52,674	\$56,308	\$4,041	\$4,256	\$79,662	\$85,350	\$93,461	\$103,473	\$99,027
Net Investment Income	91,986	73,146	(72,558)	1,811	10,436	114,906	68,750	86,587	174,348	(87,559)
Total Additions	158,195	125,820	(16,250)	5,852	14,692	194,568	154,100	180,048	277,821	11,468
<b>DEDUCTIONS</b>										
Health Premium Benefits	34,935	37,652	40,500	75,990	84,534	83,680	89,602	80,827	83,236	85,132
Administration and Other	64	65	80	47	899	946	909	1,112	1,378	1,303
Total Deductions	34,999	37,717	40,580	76,037	85,433	84,626	90,511	81,939	84,614	86,435
<b>NET CHANGE</b>	<b>123,196</b>	<b>88,103</b>	<b>(56,830)</b>	<b>(70,185)</b>	<b>(70,741)</b>	<b>109,942</b>	<b>63,589</b>	<b>98,109</b>	<b>193,207</b>	<b>(74,967)</b>
Net assets beginning of year	684,563	807,759	895,862	839,032	768,847	698,106	808,048	871,637	969,746	1,162,953
<b>NET ASSETS END OF YEAR</b>	<b>\$807,759</b>	<b>\$895,862</b>	<b>\$839,032</b>	<b>\$768,847</b>	<b>\$698,106</b>	<b>\$808,048</b>	<b>\$871,637</b>	<b>\$969,746</b>	<b>\$1,162,953</b>	<b>\$1,087,986</b>

## Financial Trends: Changes in Net Assets - Last 10 Fiscal Years

	FISCAL YEAR									
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>LTD CHANGES IN NET ASSETS</b> (in thousands)										
<b>ADDITIONS</b>										
Member Contributions	\$26,170	\$28,027	\$29,938	\$32,938	\$34,801	\$36,026	\$38,982	\$41,188	\$44,518	\$47,171
Employer Contributions	26,170	28,027	29,938	32,938	34,800	36,026	38,982	41,188	44,518	47,171
Net Investment Income	3,219	5,493	(6,492)	(7,519)	3,461	17,100	13,651	18,080	30,526	(21,623)
Total Additions	55,559	61,547	53,383	58,357	73,062	89,152	91,615	100,457	119,562	72,719
<b>DEDUCTIONS</b>										
Disability Benefits	39,839	41,220	45,848	54,804	54,688	58,976	62,183	66,695	69,221	68,284
Administration and Other	2,057	1,954	2,033	2,732	2,177	2,515	2,460	2,593	2,857	2,750
Total Deductions	41,896	43,174	47,881	57,536	56,865	61,491	64,643	69,288	72,078	71,034
<b>NET CHANGE</b>	<b>13,663</b>	<b>18,373</b>	<b>5,503</b>	<b>821</b>	<b>16,197</b>	<b>27,661</b>	<b>26,972</b>	<b>31,168</b>	<b>47,484</b>	<b>1,685</b>
Net assets beginning of year	55,644	69,307	87,680	93,183	94,004	110,201	137,862	164,834	196,002	243,486
<b>Net assets end of year</b>	<b>\$69,307</b>	<b>\$87,680</b>	<b>\$93,183</b>	<b>\$94,004</b>	<b>\$110,201</b>	<b>\$137,862</b>	<b>\$164,834</b>	<b>\$196,002</b>	<b>\$243,486</b>	<b>\$245,171</b>

## Financial Trends: Benefits Paid - Last 10 Fiscal Years

<b>RETIREMENT BENEFITS PAID</b> (in thousands)										
	<b>FISCAL YEAR</b>									
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Retirement Benefits	\$627,612	\$695,426	\$809,133	\$924,172	\$1,067,481	\$1,238,966	\$1,406,547	\$1,538,992	\$1,650,818	\$1,768,219
Survivor Benefits	11,485	13,256	14,134	14,078	15,861	14,859	18,402	17,125	21,590	22,648
Total Benefits	\$639,097	\$708,682	\$823,267	\$938,250	\$1,083,342	\$1,253,825	\$1,424,949	\$1,556,117	\$1,672,408	\$1,790,867
Refunds due to Separation	\$26,108	\$70,755	\$98,535	\$42,765	\$35,976	\$36,212	\$44,164	\$60,313	\$77,910	\$104,387

<b>HBS BENEFITS PAID</b> (in thousands)										
	<b>FISCAL YEAR</b>									
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Health Premium Benefits	\$34,935	\$37,651	\$40,500	\$75,990	\$84,534	\$83,680	\$89,602	\$80,827	\$83,236	\$85,132

<b>LTD BENEFITS PAID</b> (in thousands)										
	<b>FISCAL YEAR</b>									
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Disability Benefits	\$39,839	\$41,220	\$45,848	\$54,804	\$54,688	\$58,976	\$62,183	\$66,271	\$69,221	\$68,284

## Revenues: Contributions Received - Last 10 Fiscal Years

<b>RETIREMENT CONTRIBUTIONS RECEIVED (in thousands)</b>										
	<b>FISCAL YEAR</b>									
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Member Contributions	\$152,917	\$124,931	\$133,504	\$135,275	\$142,356	\$377,436	\$403,661	\$570,933	\$766,962	\$857,813
Employer Contributions	86,707	72,256	77,196	131,234	138,100	297,770	318,311	477,472	663,544	759,482
<b>Total Contributions</b>	<b>\$239,624</b>	<b>\$197,187</b>	<b>\$210,700</b>	<b>\$266,509</b>	<b>\$280,456</b>	<b>\$675,206</b>	<b>\$721,972</b>	<b>\$1,048,405</b>	<b>\$1,430,506</b>	<b>\$1,617,295</b>

<b>HBS CONTRIBUTIONS RECEIVED (in thousands)</b>										
	<b>FISCAL YEAR</b>									
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Employer Contributions	\$66,209	\$52,674	\$56,308	\$4,041	\$4,256	\$79,662	\$85,350	\$93,461	\$103,473	\$99,027

<b>LTD CONTRIBUTIONS RECEIVED (in thousands)</b>										
	<b>FISCAL YEAR</b>									
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Member Contributions	\$26,170	\$28,027	\$29,938	\$32,938	\$34,801	\$36,026	\$38,982	\$41,188	\$44,518	\$47,171
Employer Contributions	26,170	28,027	29,938	32,938	34,800	36,026	38,982	41,188	44,518	47,171
<b>Total Contributions</b>	<b>\$52,340</b>	<b>\$56,054</b>	<b>\$59,876</b>	<b>\$65,875</b>	<b>\$69,601</b>	<b>\$72,052</b>	<b>\$77,964</b>	<b>\$82,376</b>	<b>\$89,036</b>	<b>\$94,342</b>

## Revenues: Actual Contributions Rates - Last 10 Fiscal Years

<b>RETIREMENT CONTRIBUTION RATES</b>										
	<b>FISCAL YEAR</b>									
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Member	2.85	2.17	2.17	2.00	2.00	5.20	5.20	6.90	8.60	9.10
Employer	1.61	1.25	1.25	1.94	1.94	4.10	4.10	5.77	7.55	8.05

<b>HBS CONTRIBUTION RATES</b>										
	<b>FISCAL YEAR</b>									
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Employer	1.24	0.92	0.92	0.06	0.06	1.10	1.10	1.13	1.05	1.05

<b>LTD CONTRIBUTION RATES</b>										
	<b>FISCAL YEAR</b>									
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Member	0.49	0.49	0.49	0.49	0.49	0.50	0.50	0.50	0.50	0.50
Employer	0.49	0.49	0.49	0.49	0.49	0.50	0.50	0.50	0.50	0.50

## Operations: Members by Type of Benefit As of June 30, 2008

RETIREMENT MONTHLY BENEFIT	OPTIONS*						
	1	2	3	4	5	6	7
<b>\$1 - 299</b>	\$ 5,723	\$ 293	\$ 345	\$ 575	\$ 1,486	\$ 132	\$ 236
<b>300 - 499</b>	4,719	374	525	474	1,510	181	323
<b>500 - 999</b>	10,092	869	1,340	1,003	2,921	636	1,020
<b>1000 - 1499</b>	6,904	733	1,157	611	2,426	693	989
<b>1500 - 1999</b>	4,432	461	659	447	1,870	614	839
<b>2000 &amp; Over</b>	12,209	894	1,293	1,423	5,568	2,018	2,577
<b>TOTALS</b>	<b>\$44,079</b>	<b>\$3,624</b>	<b>\$5,319</b>	<b>\$4,533</b>	<b>\$15,781</b>	<b>\$4,274</b>	<b>\$5,984</b>

**\* Options Key:**

- 1 Life annuity - refund provision
- 2 Life annuity - 5 years certain and life
- 3 Life annuity - 10 years certain and life
- 4 Life annuity - 15 years certain and life
- 5 Joint annuity - 100 percent to contingent survivor
- 6 Joint annuity - 66 2/3 percent to contingent survivor
- 7 Joint annuity - 50 percent to contingent survivor

The above schedule does not include System retirees.

Source: Buck Consultants, LLC

HBS MONTHLY BENEFITS	MEMBERS
<b>\$1-199</b>	52,405
<b>200-299</b>	2,999
<b>300-399</b>	432
<b>400 &amp; Over</b>	72
<b>TOTAL</b>	<b>55,908</b>

LTD MONTHLY BENEFIT	MEMBERS
<b>\$1-299</b>	9
<b>300-499</b>	48
<b>500-999</b>	571
<b>1000-1499</b>	1,449
<b>1500-1999</b>	1,310
<b>2000 &amp; over</b>	1,570
<b>TOTAL</b>	<b>4,957</b>

Source: ASRS Pension Administration System

Source: Sedgewick CMS

## Operations: Average Benefit Payments - Last 10 Fiscal Years

### RETIREMENT

	Years of Credited Service									
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45+
<b>Fiscal year 1998</b>										
Average monthly benefit	\$122	\$254	\$499	\$789	\$1,196	\$1,785	\$2,248	\$2,318	\$1,749	\$1,565
Number of retirees	1,149	8,788	11,050	9,305	8,786	7,718	3,908	965	226	22
<b>Fiscal year 1999</b>										
Average monthly benefit	\$120	\$259	\$511	\$806	\$1,230	\$1,846	\$2,332	\$2,448	\$1,969	\$1,771
Number of retirees	1,251	9,180	11,581	9,653	9,393	8,475	4,294	1,039	217	21
<b>Fiscal year 2000</b>										
Average monthly benefit	\$125	\$278	\$550	\$872	\$1,328	\$2,013	\$2,541	\$2,732	\$2,339	\$2,011
Number of retirees	1,321	9,454	12,076	10,061	9,944	9,169	4,683	1,106	207	17
<b>Fiscal year 2001</b>										
Average monthly benefit	\$130	\$293	\$600	\$939	\$1,414	\$2,119	\$2,694	\$2,956	\$2,694	\$2,671
Number of retirees	1,338	9,450	12,164	10,033	10,115	9,611	4,891	1,120	180	18
<b>Fiscal year 2002</b>										
Average monthly benefit	\$142	\$317	\$664	\$1,042	\$1,578	\$2,368	\$2,990	\$3,286	\$3,195	\$3,958
Number of retirees	1,397	9,357	12,188	10,145	10,443	10,023	5,399	1,193	182	19
<b>Fiscal year 2003</b>										
Average monthly benefit	\$149	\$328	\$695	\$1,068	\$1,571	\$2,312	\$2,957	\$3,314	\$3,535	\$4,335
Number of retirees	1,555	9,744	12,811	10,568	11,103	10,838	6,477	1,373	203	25
<b>Fiscal year 2004</b>										
Average monthly benefit	\$139	\$345	\$726	\$1,109	\$1,629	\$2,384	\$3,092	\$3,499	\$3,863	\$4,413
Number of retirees	1,716	10,153	13,268	10,984	11,747	11,567	7,607	1,611	248	30
<b>Fiscal year 2005</b>										
Average monthly benefit	\$125	\$326	\$687	\$1,742	\$1,995	\$2,460	\$2,894	\$3,035	\$3,082	\$2,817
Number of retirees	1,697	10,290	13,540	19,674	16,813	8,394	2,815	550	77	3
<b>Fiscal year 2006</b>										
Average monthly benefit	\$126	\$334	\$702	\$1,746	\$2,079	\$2,541	\$3,001	\$3,190	\$3,427	\$3,255
Number of retirees	1,889	10,789	13,986	19,845	18,680	9,419	3,215	592	81	2
<b>Fiscal year 2007</b>										
Average monthly benefit	\$121	\$329	\$697	\$1,743	\$2,101	\$2,572	\$3,034	\$3,268	\$3,616	\$4,542
Number of retirees	2,124	11,416	14,534	20,663	20,232	10,474	3,454	615	78	4

Average final salary information is not available.

Source: Buck Consultants, LLC

## Operations: Average Benefit Payments - Last 10 Fiscal Years

### HBS

	Years of Credited Service					
	5	6	7	8	9	10 or more
<b>Fiscal year 2006</b>						
Average monthly benefit	\$65	\$71	\$81	\$86	\$103	\$130
Number of HBS participants	1,008	861	872	869	895	47,117
<b>Fiscal year 2007</b>						
Average monthly benefit	\$57	\$69	\$83	\$89	\$96	\$130
Number of HBS participants	1,046	877	903	885	891	49,368
<b>Fiscal year 2008</b>						
Average monthly benefit	\$61	\$72	\$76	\$89	\$97	\$130
Number of HBS participants	1,082	917	911	934	897	51,167

Note: Information for prior years is not available.

Source: ASRS Pension Administration System

### LTD

<b>Fiscal year 2006</b>	
Average monthly benefit	\$1,689
Number of LTD participants	4,968
<b>Fiscal year 2007</b>	
Average monthly benefit	\$1,743
Number of LTD participants	4,976
<b>Fiscal year 2008</b>	
Average monthly benefit	\$1,823
Number of LTD participants	4,957

Note: Long term disability payments are based on salary and not years of credited service. Information for prior to 2006 is not available.

Source: Sedgewick CMS

## Operations: Principal Participating Employers - Current Year and Nine Years Ago

Participating Employer	2008			1999		
	Covered Employees	Rank	% of Membership	Covered Employees	Rank	% of Membership
Dept Of Administration	31,778	1	13.95%	29,361	1	18.50%
Maricopa County	9,449	2	4.15%	8,434	2	5.31%
Mesa Unified Dist 4	8,406	3	3.69%	6,949	4	4.38%
Tucson Unified Dist 1	7,768	4	3.41%	7,432	3	4.68%
University Of Arizona	7,308	5	3.21%	6,800	5	4.29%
Pima County	6,136	6	2.69%	5,001	6	3.15%
Maricopa County Community College District	6,095	7	2.68%	3,685	8	2.32%
Arizona State University	5,669	8	2.49%	4,509	7	2.84%
Gilbert Unified Dist 41	4,904	9	2.15%			
Maricopa County Special Health Care Dist	3,878	10	1.70%	2,891	10	1.82%
Paradise Valley Unified Dist 69				3,201	9	2.02%
*All other	136,339		59.87%	80,422		50.68%
<b>TOTAL</b>	<b><u>227,730</u></b>		<b><u>100.00%</u></b>	<b><u>158,685</u></b>		<b><u>100.00%</u></b>

\* In 2007, "All Other" consisted of:

Type	Number	Employees
Public Schools	232	94,585
Charter Schools	159	4,183
Cities	77	20,021
Counties	13	8,618
Higher Education	10	6,050
Other	<u>85</u>	<u>2,882</u>
	<u>576</u>	<u>136,339</u>

Note: All participating employers participate in the retirement, HBS and LTD plans.

Source: ASRS Pension Administration System

